

Evaluation  
**Report**

Alabama Law Enforcement Planning Agency  
Evaluation Management Unit  
Office of Public Service and Research  
Auburn University

PROSECUTORIAL  
ASSISTANCE PROGRAM

46016  
9/10/97

George C. Wallace, Governor  
Earl C. Morgan, Chairman of State Board  
Robert G. "Bo" Davis, Director  
Richard Hamilton, Chief Evaluation Officer

Evaluation Project  
Office of Public Service and Research  
Auburn University  
Auburn, Alabama

PROSECUTORIAL  
ASSISTANCE PROGRAM

Staff Evaluation Work Performed By

Rebecca D. Paulk

Marshall T. Miller  
Project Coordinator

Kenneth J. Likis  
Assistant Coordinator

NCJRS

APR 3 1978

ACQUISITIONS

February 1978

## EXECUTIVE SUMMARY

### Project Description:

Since 1970 the Alabama Law Enforcement Planning Agency (ALEPA) has provided funding for supportive personnel to district attorney offices with congested workloads through its Project 1 of the E-4 Program. The appropriations for this project from 1970 through 1977 total \$5,807,839. In 1977 alone, 29 of the 38 district attorney offices in Alabama were receiving a total of \$398,130 in E-4 funding.

The goal of Project 1 of the E-4 Program is to maintain high prosecutorial efficiency in a time of increasing workloads and responsibilities by providing supportive personnel to the prosecution. Its objectives are: (a) to reduce case backlog; (b) to reduce the delays in prosecution (expeditious prosecution); and (c) to increase the successful prosecution rate (effective prosecution).

### Evaluation Methodology:

To determine the impact of E-4 funding on prosecution the evaluator studied the criminal caseloads activities in four judicial circuits for the eight-year period 1969-1976. The district attorney offices in three of the circuits received E-4 funding and served as treatment groups; the fourth circuit received no E-4 funding and served as the control group. The treatment groups began receiving funding in different years, but continued receiving it from the point of initial funding on through to the end of the observation period. The observation period was long enough to allow data collection from a minimum of three years before treatment and three years after treatment for each funded circuit observed.

The circuits studied were chosen on the basis of the requirements of the ex post facto staggered time series design. This design enables the evaluator to address the issue of causality: to consider whether an observed change in a variable is the result of a particular treatment. Through this design the evaluator establishes the trend for a variable during the pre-treatment and post-treatment periods for the treatment groups and throughout the observation period for the control group. The appearance of similar desirable trends in the treatment groups and a different trend in the control group allows the evaluator to make the causal assertion that the desirable trends are the results of the treatment.

Within the framework of the ex post facto staggered time series design the evaluator examined four variables: (1) adjusted annual backlog; (2) expeditious prosecution; (3) effective prosecution; and (4) prosecutorial efficiency. The first three variables are measures of objectives a, b, and c, respectively, and the fourth is a measure of the program goal. All of the variables were developed specifically for this study.

Whereas traditionally the yearly backlog is defined as those cases left pending at the end of the year, adjusted annual backlog is based on the number of cases pending on December 31st that were indicted by the previous January 1st and had sufficient time to pass through the judicial system. This measure eliminates those cases left over from previous years and those cases indicted too late in the year to allow adequate time for disposition by December 31st from backlog considerations for a given calendar year. The expeditiousness variable determines the

relative dispatch with which cases moved from arrest to disposition: the proportion of cases disposed of within 210 days, in 211 to 365 days, and in over 365 days.

The effective prosecution variable is used to determine the proportion of cases in each of three categories: effective prosecutions (jury trial/guilty, judge trial/guilty, guilty plea to original charge); non-effective prosecutions (jury trial/innocent, judge trial/innocent, demurrer, dismissal); and other (pending, not processed, guilty plea to lesser offense). Finally, the efficiency variable is an index based on a combination of the results from the expeditiousness variable and the effectiveness variable.

These variables were computed for each circuit studied for all years in the observation period and analyzed on a trend basis. The data sources for the adjusted annual backlog were the grand jury reports and the criminal docket sheets. For the other variables the data source was the criminal docket sheets, from which a sample of over 2,000 cases was taken.

#### Findings:

The results from the adjusted annual backlog variable do not indicate a clear-cut reduction in case backlog through E-4 funding. The findings do indicate, however, that the treatment helped district attorneys avoid accelerated increases in backlog when confronted with a rising number of indictments. A clear-cut reduction in case backlog would have been signaled by steady decreases in the adjusted backlogs of the treatment groups after program implementation accompanied by either stable or increasing adjusted annual backlogs in the control group. Though the adjusted annual backlogs of the control group fit the anticipated pattern, the trends for the adjusted

annual backlogs of the treatment groups are toward increase (Figure 5, page 42). None of the trends for the treatment groups, however, show as dramatic an increase as the trend for the unfunded treatment group.

The findings from the expeditious prosecution variable indicate that the hiring of supportive personnel had a positive impact on the rate at which criminal cases were disposed of in the circuits under observation. This causal assertion is based on the observation of similar trends in the treatment groups and a different trend in the control group (Figure 6, page 51). In each of the treatment groups the proportion of cases that moved from arrest to disposition in 210 days fluctuated significantly prior to the implementation of the E-4 Program. Once the supportive personnel were hired, however, the proportion of cases disposed of within the 210-day standard (Category I cases) became stable, and the highest proportion of cases disposed of within the standard came in a post-treatment year. In the control group on the other hand, the proportion of cases disposed of within the 210-day standard varied greatly throughout the observation period. Also, the proportion of cases classified as Category I dispositions was lower for the control group than it was for any of the treatment groups in those years comprising the various post-treatment periods.

The annual measures for prosecutorial effectiveness reveal no consistent trends among treatment circuits (Figure 7, page 66). While this finding indicates that no notable increases in effectiveness occurred in the circuits as a result of E-4 funding, it also supports the conclusion that there were no significant decreases in effectiveness. Each of the circuits therefore at least maintained its pre-treatment level of effectiveness. This factor

allows the evaluator to conclude that the prosecution staffs achieved the significant increases in expeditious dispositions revealed by the expeditiousness variable while maintaining their previous levels of effectiveness.

The goal for Project 1 of the E-4 Program is to maintain high prosecutorial efficiency in a time of increasing workloads by providing supportive personnel to the prosecution. The results of the prosecutorial efficiency variable indicate that the funded circuits achieved this goal. In two of the treatment circuits the efficiency index rose after program implementation, and in the third treatment group it stabilized (Figure 8, page 74). In contrast, the prosecutorial efficiency index for the control group was high during the first two years of the observation period but decreased slightly over the remainder. These trends allow the evaluator to conclude that the improvements in prosecutorial efficiency demonstrated in the treatment circuits are the result of ALEPA E-4 funding.

#### Conclusions:

In terms of the measurement criteria of this study, Project 1 of ALEPA's E-4 Program did not demonstrate achievement of its objective to increase the successful prosecution rate. It also did not demonstrate achievement of its objective to reduce case backlog, although it did prevent the accelerated increases in backlog which probably would have accompanied the rising indictments experienced by the various circuits. The E-4 Program, however, did demonstrate achievement of its objective to reduce delays in prosecution and achievement of its goal to maintain prosecutorial efficiency in a time of rising indictments. The results of the study indicate, then, that because of the E-4 Program a higher

proportion of cases are moving through to disposition within 210 days and a higher proportion of cases are meeting either both or one of the criteria for expeditiousness and effectiveness than was true prior to program implementation. These achievements signal distinct progress on the part of the prosecution toward relieving the general sluggishness of the judicial system as a result of Project 1 of the E-4 Program.

Recommendations:

1. ALEPA should continue to fund Project 1 of the E-4 Program within the limits allowed by the current assumption of cost policy.
2. The state of Alabama should assume the cost of personnel hired under the E-4 Program in accordance with the assumption of cost schedule governing ALEPA's support of the program.

## TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION . . . . .	1
A. PROBLEM . . . . .	1
B. PROJECT DESCRIPTION . . . . .	3
1. GOAL . . . . .	3
2. OBJECTIVES . . . . .	3
3. METHODS AND PROCEDURES . . . . .	4
4. RELATIONSHIP OF PROJECT TO ADOPTED ALEPA STANDARDS AND GOALS . . . . .	6
II. EVALUATION METHODOLOGY . . . . .	7
A. THE EX POST FACTO STAGGERED TIME SERIES DESIGN . . . . .	8
1. APPROPRIATENESS OF THE DESIGN TO THE PROJECT BEING EVALUATED . . . . .	11
2. DESIGN COMPONENTS . . . . .	12
a. <u>Observation Units</u> . . . . .	13
(1) <u>Treatment Groups</u> . . . . .	13
(a) <u>Selection of Treatment Groups</u> . . . . .	13
(b) <u>Nature of Treatment</u> . . . . .	17
(2) <u>Control Group</u> . . . . .	17
b. <u>Observation Period</u> . . . . .	18
B. VARIABLES TO BE CONSIDERED . . . . .	18
1. ADJUSTED ANNUAL BACKLOG . . . . .	19
2. EXPEDITIOUS PROSECUTION . . . . .	24
3. EFFECTIVE PROSECUTION . . . . .	25

	<u>Page</u>
4. PROSECUTORIAL EFFICIENCY . . . . .	27
C. DATA COLLECTION . . . . .	30
1. DATA COLLECTION FOR ADJUSTED ANNUAL BACKLOG . . . . .	31
2. DATA COLLECTION FOR REMAINING VARIABLES . . . . .	31
a. <u>Sampling Procedure</u> . . . . .	31
b. <u>Chi-Square Significance Test</u> . . . . .	34
c. <u>Coding Techniques</u> . . . . .	35
D. LIMITATIONS AND ASSUMPTIONS OF THIS EVALUATION . . . . .	35
III. PRESENTATION AND ANALYSIS OF DATA . . . . .	41
A. ADJUSTED ANNUAL BACKLOG . . . . .	41
B. EXPEDITIOUS PROSECUTION . . . . .	49
C. EFFECTIVE PROSECUTION . . . . .	65
D. PROSECUTORIAL EFFICIENCY . . . . .	73
IV. FINDINGS AND RECOMMENDATIONS . . . . .	78
A. FINDINGS . . . . .	78
B. RECOMMENDATIONS . . . . .	79
APPENDIX A: E-4 BUDGETS FOR THE TREATMENT GROUPS . . . . .	82
APPENDIX B: CODING SCHEME FOR COMPUTER PROCESSING OF SAMPLE DATA . . . . .	93
APPENDIX C: CONTROL CONTINGENCY TABLES FOR THE EXPEDITIOUS PROSECUTION VARIABLE . . . . .	96
APPENDIX D: STANDARD ERROR OF THE ESTIMATE CALCULATED FOR CATEGORY I OF THE EXPEDITIOUSNESS VARIABLE . . . . .	101
APPENDIX E: CONTINGENCY TABLES FOR THE EFFECTIVE PROSECUTION VARIABLE . . . . .	107
APPENDIX F: CONTROL DATA FOR THE EFFECTIVENESS VARIABLE CLAS- SIFYING PLEA-NEGOTIATED CASES AS EFFECTIVE DIS- POSITIONS . . . . .	110

TABLES

	<u>Page</u>
TABLE 1 - 1977 APPROPRIATIONS FOR PROJECT 1 OF ALEPA'S E-4 PROGRAM	4
TABLE 2 - DISTRICT ATTORNEY OFFICES THAT RECEIVED E-4 FUNDING ON A CONTINUING BASIS . . . . .	12
TABLE 3 - POPULATION OF COUNTIES CONTAINING THE TREATMENT AND CONTROL GROUPS . . . . .	14
TABLE 4 - TOTAL FILINGS FOR TREATMENT GROUPS AND CONTROL GROUP 1969-1976 . . . . .	16
TABLE 5 - EXPEDITIOUSNESS CLASSIFICATIONS . . . . .	25
TABLE 6 - EFFECTIVENESS CLASSIFICATIONS . . . . .	26
TABLE 7 - ADJUSTED ANNUAL BACKLOG FOR THE TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY, 1969-1975 . . . . .	43
TABLE 8 - ADJUSTED ANNUAL BACKLOG FOR THE THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY, 1969-1976 . . . . .	45
TABLE 9 - ADJUSTED ANNUAL BACKLOG FOR THE TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES, 1969-1976 . . . . .	47
TABLE 10 - ADJUSTED ANNUAL BACKLOG FOR THE TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, 1969-1976 . . . . .	48
TABLE 11 - NUMBER AND PERCENTAGE OF SAMPLE CASES IN EXPEDITIOUSNESS CATEGORIES I, II, AND III FOR THE TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY, 1969-1976 . . . . .	52
TABLE 12 - CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION IN THE TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY . . . . .	53
TABLE 13 - NUMBER AND PERCENTAGE OF SAMPLE CASES IN EXPEDITIOUSNESS CATEGORIES I, II, AND III FOR THE THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY, 1969-1976 . . . . .	55
TABLE 14 - CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION IN THE THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY . . . . .	57

	<u>Page</u>
TABLE 15 - NUMBER AND PERCENTAGE OF SAMPLE CASES IN EXPEDITIOUSNESS CATEGORIES I, II, AND III FOR THE TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES, 1969-1976 . . . . .	59
TABLE 16 - CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION IN THE TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES .	60
TABLE 17 - NUMBER AND PERCENTAGE OF SAMPLE CASES IN EXPEDITIOUSNESS CATEGORIES I, II, AND III FOR THE TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, 1969-1976 . . . . .	61
TABLE 18 - CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION IN THE TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, USING THE OBSERVATION PERIOD DIVISION OF THE TWENTY-SIXTH JUDICIAL CIRCUIT TREATMENT GROUP . . . . .	63
TABLE 19 - CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION IN THE TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, USING THE OBSERVATION PERIOD DIVISION OF THE THIRTY-FOURTH JUDICIAL CIRCUIT TREATMENT GROUP . . . . .	63
TABLE 20 - CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION IN THE TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, USING THE OBSERVATION PERIOD DIVISION OF THE TWENTIETH JUDICIAL CIRCUIT TREATMENT GROUP . . . . .	64
TABLE 21 - NUMBER AND PERCENTAGE OF SAMPLE CASES IN EACH EFFECTIVENESS CATEGORY FOR THE TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY, 1969-1976 . . . . .	68
TABLE 22 - NUMBER AND PERCENTAGE OF SAMPLE CASES IN EACH EFFECTIVENESS CATEGORY FOR THE THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY, 1969-1976 . . . . .	69
TABLE 23 - NUMBER AND PERCENTAGE OF SAMPLE CASES IN EACH EFFECTIVENESS CATEGORY FOR THE TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES, 1969-1976 . . . . .	70
TABLE 24 - NUMBER AND PERCENTAGE OF SAMPLE CASES IN EACH EFFECTIVENESS CATEGORY FOR THE TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, 1969-1976 . . . . .	71
TABLE 25 - THE EFFICIENCY INDEXES FOR EACH CIRCUIT STUDIED FOR THE ENTIRE OBSERVATION PERIOD . . . . .	75

FIGURES

	<u>Page</u>
FIGURE 1 - THE EX POST FACTO STAGGERED TIME SERIES DESIGN . .	8
FIGURE 2 - LOCATION OF THE COUNTIES CONTAINING THE TREATMENT AND CONTROL GROUPS . . . . .	15
FIGURE 3 - FORMULA FOR ADJUSTED ANNUAL BACKLOG . . . . .	22
FIGURE 4 - THE FOUR DISPOSITION CATEGORIES FOR THE PROSECU- TORIAL EFFICIENCY INDEX . . . . .	29
FIGURE 5 - THE TRENDS FOR THE ADJUSTED ANNUAL BACKLOG FOR ALL CIRCUITS STUDIED . . . . .	42
FIGURE 6 - THE TRENDS FOR THE PROPORTION OF SAMPLE CASES IN EXPEDITIOUSNESS CATEGORIES I, II, AND III FOR ALL CIRCUITS STUDIED . . . . .	51
FIGURE 7 - THE TRENDS FOR THE PROPORTION OF SAMPLE CASES IN THE EFFECTIVENESS CATEGORIES FOR ALL CIRCUITS STUDIED . . . . .	66
FIGURE 8 - THE TRENDS FOR THE PROSECUTORIAL EFFICIENCY INDEX FOR ALL CIRCUITS STUDIED . . . . .	74

## I. INTRODUCTION

### A. PROBLEM

The primary challenge facing the Alabama courts system--and courts systems throughout the nation--is the expanding workload caused by the increasing number of cases entering the system. From 1972 to 1976, the number of felonies reported in the state increased from 64,662 to 139,573\* while the population of the state remained virtually the same. The number of cases filed in criminal courts increased from 17,421 in 1972 to 25,399 in 1976, approximately a 46% rise. Criminal indictments increased by 61% from 1972 to 1976, which amounts to a numerical increase in true bills from 11,418 to 18,402. During the same period statewide criminal appeals increased from 5,063 in 1972 to 5,860 in 1976. The number of criminal court jury trials throughout the state rose from 1,196 in 1972 to 1,799 in 1976. Bench trials more than doubled over this four-year period. During 1972 criminal court judges tried 408 cases; in 1976 the number of bench trials was 913.\*\*

Alabama has sought to improve its judicial branch through legislative reform. The Judicial Article, which went into effect January 16, 1977, streamlined the courts system into a unified body. The

---

\*In 1972 the UCR reports from which these figures were taken changed the definition of larceny to include all thefts, not just items valued at \$50.00 or more. This change in definition accounts for part of this large increase.

\*\*All the figures on Alabama court caseloads are from a preliminary draft of the 1976 annual report of the Department of Court Management (DCM).

article abolished the county and intermediate courts and replaced them with district courts holding uniform jurisdictions, procedures, and practices. Under the article, however, municipal courts have the option to enter the state system, and the Department of Court Management predicts that with time the majority of these courts will. This aspect of the article should increase the already large workload in the courts.

The state is served by 38 district attorneys, 95 full-time assistants, and 25 part-time assistants. These 158 prosecutors perform a broad variety of duties for the state: they attend and give advice to grand juries; draw up indictments; prosecute criminal cases in circuit court; read appeal transcripts and prepare memoranda for the attorney general; attend probation hearings; and prosecute juvenile delinquency cases upon request from the court.

With the growing workloads in recent years, an efficient operation of the office of district attorney has been especially essential to the courts. This office must continue to operate in a highly efficient manner if the transition to the new district court system is to be smooth. New duties and responsibilities resulting from the change to the district court system combined with the growing workload necessitate assistance to the state's prosecutors. The prosecutorial element of the state's judicial system cannot function properly and efficiently unless it is adequately staffed and funded.

The Alabama Law Enforcement Planning Agency (ALEPA) has provided and still provides assistance to district attorney offices with its Project 1 of the E-4 Program. Instituted in 1970, this project has

made available funding for in-service training for prosecutors and for the employment of supportive personnel such as assistant district attorneys, trial coordinators, investigators, and secretaries. The total amount of funds appropriated for Project 1 of the E-4 Program during 1970-1977 is \$5,806,839.

In 1977, 29 of Alabama's 38 district attorney offices received ALEPA E-4 funding to hire or maintain a total of 8 assistant prosecutors, 20 investigators and/or trial coordinators, and 20 secretaries.

The purpose of this report is to determine whether ALEPA funding has improved the prosecutorial system. The report contains not only an assessment of the results of prior funding but also findings which should be useful for future funding decisions.

## B. PROJECT DESCRIPTION

This section describes Project 1 of ALEPA's E-4 Program for fiscal year 1977. This description serves as an indication of the type of support ALEPA has provided this project since its inception in 1970.

### 1. GOAL

The goal of Project 1 of the E-4 Program is to maintain high prosecutorial efficiency in a time of increasing workloads and responsibilities by providing supportive personnel to the prosecution.

### 2. OBJECTIVES

- a. Reduction in case backlog.
- b. Reduction of delays in prosecution (expeditious prosecution).
- c. Increase in the successful prosecution rate (effective prosecution).

### 3. METHODS AND PROCEDURES

Since 1970 ALEPA funds have been allocated to district attorneys throughout the state to employ and continue the employment of personnel who permit an efficient handling of criminal matters. A total of \$398,130 was appropriated to 29 district attorney offices throughout Alabama for the continuation over FY77 of those operations and measures which were believed beneficial and effective in managing increased workloads and responsibilities in years past (Table 1). Through the utilization of these funds, the district attorney offices continue their prosecutorial efforts within the framework of the Judicial Article Implementation Act of 1977. The funding supports the employment of secretaries, law clerks, assistant district attorneys, trial coordinators, and other personnel who are needed to manage the increasing workload.

Circuit of the Funded District Attorney Office	Amount Funded
First Judicial Circuit	\$ 4,429
Second Judicial Circuit	\$ 5,202
Third Judicial Circuit	\$ 15,698
Fourth Judicial Circuit	\$ 34,089
Fifth Judicial Circuit	\$ 30,990
Sixth Judicial Circuit	\$ 12,442
Seventh Judicial Circuit	\$ 16,380

TABLE 1 CONTINUED

Circuit of the Funded District Attorney Office	Amount Funded
Ninth Judicial Circuit	\$ 24,922
Eleventh Judicial Circuit	\$ 7,969
Twelfth Judicial Circuit	\$ 14,763
Fourteenth Judicial Circuit	\$ 14,167
Seventeenth Judicial Circuit	\$ 15,846
Eighteenth Judicial Circuit	\$ 6,136
Nineteenth Judicial Circuit	\$ 17,049
Twentieth Judicial Circuit	\$ 18,594
Twenty-second Judicial Circuit	\$ 15,749
Twenty-third Judicial Circuit	\$ 14,265
Twenty-fourth Judicial Circuit	\$ 17,630
Twenty-fifth Judicial Circuit	\$ 13,138
Twenty-sixth Judicial Circuit	\$ 9,686
Twenty-seventh Judicial Circuit	\$ 14,167
Twenty-ninth Judicial Circuit	\$ 3,984
Thirtieth Judicial Circuit	\$ 7,083
Thirty-first Judicial Circuit	\$ 9,740
Thirty-second Judicial Circuit	\$ 11,953
Thirty-fourth Judicial Circuit	\$ 15,052
Thirty-fifth Judicial Circuit	\$ 4,429
Thirty-sixth Judicial Circuit	\$ 7,969
Thirty-eighth Judicial Circuit	\$ 14,609
TOTAL FUNDING	\$398,130

4. RELATIONSHIP OF PROJECT TO ADOPTED ALEPA STANDARDS AND GOALS

Project 1 of the the E-4 Program complies with standard 12.3 of the adopted Alabama Standards and Goals, "Supporting Staff and Facilities."

## II. EVALUATION METHODOLOGY

This E-4 Program evaluation is an attempt to determine how effective ALEPA's efforts to provide assistance to district attorney offices have been in improving prosecutorial efficiency. The project's stated objectives are used as the measures of success, and an index that combines the program's objectives is used as the measure of prosecutorial efficiency. The chi-square significance test is used to determine whether changes in the expeditious or effective prosecution of cases observed in sample data are sufficiently sound statistically to allow for inferences about the entire population of criminal cases in the circuits under study.

Operational definitions, data collection procedures, and analytical techniques enable the evaluator to determine whether significant changes have occurred in the circuits being studied: changes in case backlog, number of expeditious cases, and number of effective dispositions. If significant changes are discovered, then the evaluator must address the issue of causality. Can observed changes be attributed to the presence or absence of an ALEPA-funded project? The evaluator approaches this question through the use of a research design. For this study the evaluation staff developed the ex post facto staggered time series design. The development of this design and the following discussion of its strengths owes much to the book Experimental and Quasi-experimental Designs (Rand McNally College Publishing Company, Chicago, 1963) by Donald T. Campbell and Julian C. Stanley. The ex post facto staggered time series design is a variation of Campbell and Stanley's multiple-time series design.

A. THE EX POST FACTO STAGGERED TIME SERIES DESIGN

The ex post facto staggered time series design employs three treatment groups and one control group, each nonrandomly selected. The three treatment groups in this study received E-4 funding in staggered sequence and continued to receive it through the observation period (Figure 1). The time series aspect of this design requires the observation period to be extended over a period of years--in this case 1969-1976--in order to provide a better estimate of what the trends would have been had the program not been implemented. The nonrandomly selected control group receives no treatment and is observed over the same period as the treatment groups.

FIGURE 1								
THE EX POST FACTO STAGGERED TIME SERIES DESIGN								
Observation Units	Observation Period							
	1969	1970	1971	1972	1973	1974	1975	1976
Treatment Group A	0	0	0	0	X	0	0	0
Treatment Group B	0	0	0	X	0	0	0	0
Treatment Group C	0	0	0	0	0	X	0	0
Control Group	0	0	0	0	0	0	0	0
<p>The letter <u>0</u> indicates an observation or measurement of a variable that is under consideration. The letter <u>X</u> represents the introduction of a treatment or funded program. The use of dashes to separate rows indicates that the groups are not equivalent.</p>								

The strength of the ex post facto staggered time series design is its ability to control for internal validity threats. Internal validity threats are events or trends that compete with a given treatment as possible explanations of changes in the variables being observed. In other words, validity threats are rival causes, and as Campbell and Stanley point out, the observer's primary concern should be those rival causes that are not only possible but also plausible. In this study the evaluator is concerned with plausible rival causes that threaten inferences about the treatment of ALEPA E-4 funding producing the desired outcomes of reduction in case backlog, reduction in trial delay, and an increase in successful prosecutions.

There are three aspects of this design that permit the evaluator to refute many validity threats as being plausible causes. First, the ex post facto nature of the design provides a setting in which the evaluator unobtrusively collects information from routinely kept records. This unobtrusive method of observation controls for the possibility of the act of observation producing effects that might be attributed to the treatment. The court docket sheet is the principal data source for this study, and this record has been routinely maintained for many years prior to the treatment and for all the years following the treatment. A significant effect observed in the eight years under observation for this study is not very likely to be due to the measurement process used in this study.

A second aspect of the design is its use of multiple observations over a period of time. If only two observations are made--at pre-treatment and post-treatment--there is the possibility that an observed

change is merely the result of natural fluctuations in the phenomenon being observed. Campbell and Stanley call this threat "instability" and suggest that when nonrandom selections have been used instability can best be controlled for by extending the number of observations beyond the necessary two. The observation period for this study allows a minimum of three observations before and after treatment. The use of multiple observations enables the evaluator to control for natural instability in the data. This method also allows the evaluator to observe trends that might have begun before treatment and to consider the possibility that a purported change is nothing more than the interim result of an ongoing trend.

Finally, the ex post facto staggered time series design employs multiple treatment groups that receive the treatment at different times and a control group that never receives the treatment. Even if the measurement process, instability of data, and trends can be dismissed as plausible causes, an observed change still might have resulted from an event other than the treatment. The likelihood that such an event or events would occur in the treatment groups at the differing treatment times and not occur in the control group, however, is not very great. The possibility of such an occurrence cannot be ruled out, but the plausibility is low.

If an observed change in each circuit coincides with the treatment, even though the treatment times differ, and this change does not appear in the control circuit, logic and parsimony support the conclusion that the treatment is the most plausible cause of the change. Just as statistical techniques enable a researcher to comment on the probability

of an outcome, the ex post facto staggered time series design provides a framework which permits the researcher to examine the plausibility of the cause of a given outcome.

1. APPROPRIATENESS OF THE DESIGN TO THE PROJECT BEING EVALUATED

Three characteristics of the Project 1 of the ALEPA E-4 Program encourage the use of the ex post facto staggered time series design to assess the impact of the prosecutorial assistance funding. First, since the E-4 Program was developed in 1970, the general trend for the funding procedures has been for ALEPA to annually renew E-4 grants in order to continue the efforts to increase prosecutorial efficiency. Because a number of district attorneys have received funding for several years, the period of observation for the study can be long enough to permit the use of an ex post facto time series analysis.

The second characteristic of E-4 funding that encourages the use of ex post facto staggered time series design for the evaluation is the staggered sequence of E-4 project implementation. Four of the district attorney offices that were initially awarded E-4 grants in 1972 are still receiving funding. A total of six district attorney offices that were originally funded in 1973 are still receiving prosecutorial assistance funding. During 1974 prosecutorial assistance funds were awarded to seven district attorney offices, and all have continued to receive E-4 grants\* (Table 2, page 12).

---

\*These grants were awarded from monies originally appropriated for fiscal years 1971, 1972, and 1973, but the actual implementation of the programs did not occur until the year following the date of appropriation.

TABLE 2 DISTRICT ATTORNEY OFFICES THAT RECEIVED E-4 FUNDING ON A CONTINUING BASIS	
Year	District Attorney Office By County
1972	Dallas, Lauderdale, Madison, and Russell
1973	Cullman, DeKalb, Elmore, Franklin, Jefferson, and Montgomery
1974	Autauga, Chambers, Coffee, Covington, Henry and Houston, Lawrence, and Tuscaloosa

Finally, the nature of the subject being evaluated, the performance of the prosecution in its normal operation over time, argues for the ex post facto analysis inherent in this design. This factor enables the evaluator to avoid demanding new kinds of information from the prosecution and instead to take advantage of the large amount of criminal caseload data that is routinely recorded. Every judicial circuit in the state employs a circuit clerk who has the responsibility of recording data on every case disposed of in the circuit. The information that is routinely recorded includes: date of arrest; date of disposition; type of disposition; original charge; final charge; type of attorney; the judge; and length of the sentence. Making use of data items that are routinely recorded is a true strength of the ex post facto staggered time series design.

## 2. DESIGN COMPONENTS

The components of the ex post facto staggered time series design are the observation units and the observation period.

a. Observation Units

The observation units for this study are four judicial circuits: three treatment groups and one control group.

(1) Treatment Groups

The three judicial circuits selected as the treatment groups for this study are: the Twenty-sixth Judicial Circuit, Russell County; the Thirty-fourth Judicial Circuit, Franklin County; and the Twentieth Judicial Circuit, Henry and Houston counties.

(a) Selection of Treatment Groups

The three judicial circuits serving as treatment groups were selected nonrandomly on the basis of five criteria. First, the ex post facto staggered time series design requires that the treatment groups receive the treatment of E-4 funds in staggered sequence. The E-4 program was implemented in the Twenty-sixth Judicial Circuit in 1972, the Thirty-fourth Judicial Circuit in 1973, and in the Twentieth Judicial Circuit in 1974. Therefore these circuits satisfy the first criterion.

The ex post facto staggered time series design requires not only the staggered sequence of program implementation but also the continuous funding of each circuit's program from the point of initial funding on through to the end of the observation period. The Twenty-sixth, Thirty-fourth, and the Twentieth judicial circuits also meet this second criterion. The respective offices of the district attorney in these three circuits received ALEPA E-4 funds from 1972 to 1976, from 1973 to 1976, and from 1974 to 1976.

The third criterion for selecting the treatment groups was location. The Twenty-sixth, Thirty-fourth, and Twentieth judicial circuits were selected because of their relative locations within the state. The Twenty-sixth Judicial Circuit is located in the east central portion of the state, the Thirty-fourth Judicial Circuit is in the northwest, and the Twentieth Judicial Circuit is in the southeast (Figure 2, page 15). The spread of the treatment groups prevents factors such as regional political attitudes and regional crimes (crimes which increase as a result of location such as auto theft in tri-state regions) from becoming intervening variables in the study.

The fourth criterion for selecting the treatment groups was equivalent population totals. Since the population totals for each of the groups under observation, including the control group, are relatively equivalent (Table 3), the probability is low that factors related to population density would act as rival explanations to findings.

Circuit	County	Population
Twenty-sixth	Russell	45,394
Thirty-fourth	Franklin	23,933
Twentieth	Henry and Houston	69,828
Twenty-ninth	Talladega	65,280

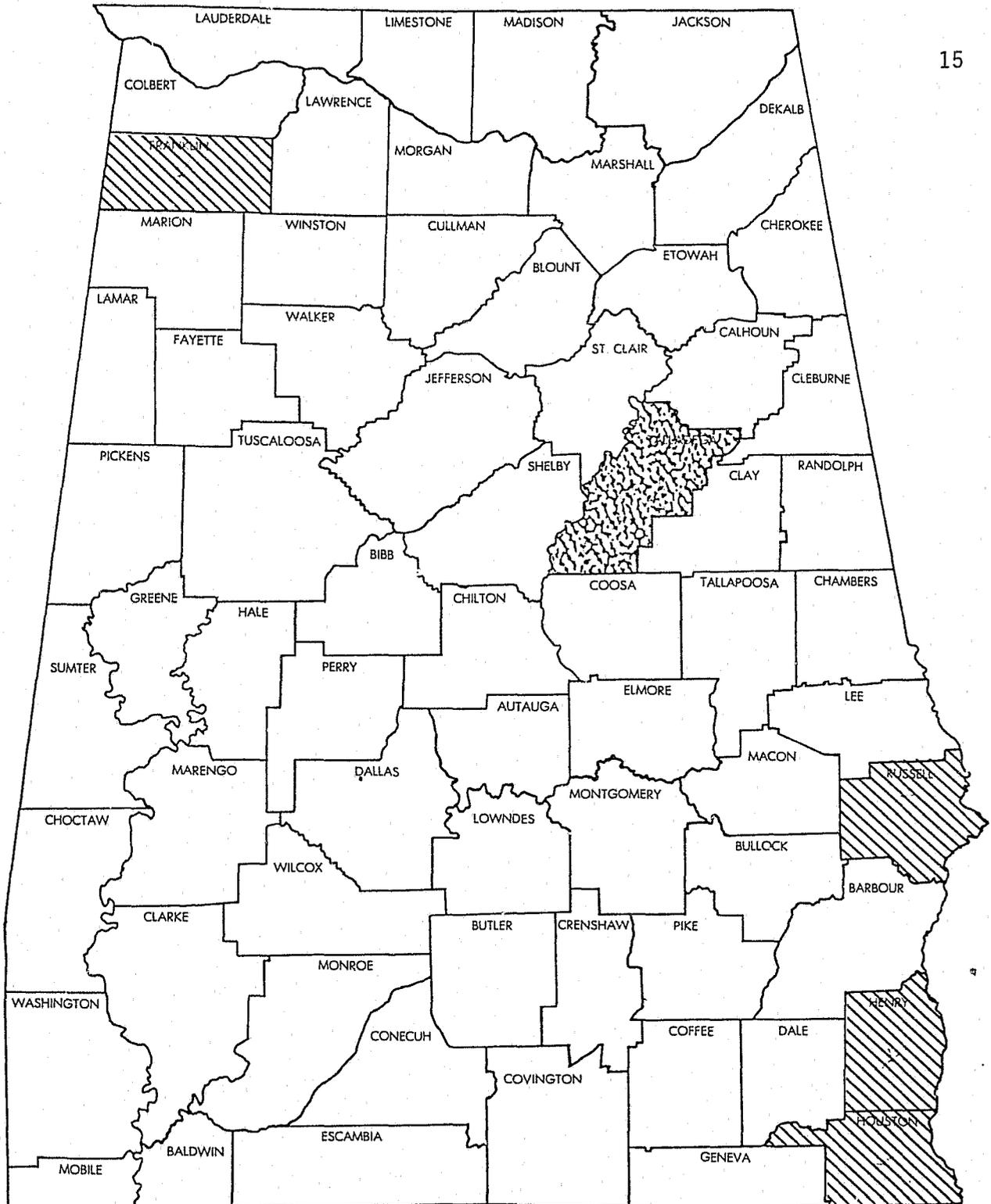


FIGURE 2  
LOCATION OF THE COUNTIES CONTAINING  
THE TREATMENT AND CONTROL GROUPS

 Treatment Group

 Control Group

Finally, the fifth criterion calls for caseloads of similar sizes. The reason for using caseloads as a basis for selecting treatment groups is to eliminate the possibility of an extremely light or heavy caseload as an alternative explanation for the cause of an observed change. The average filings for 1969-1976 for each of the circuits under study fall into the 161 to 430 range (Table 4). This range is close considering that according to DCM statistics the number of filings for individual circuits throughout the state ranged from 101 to 5,053 between 1972 and 1975.

TABLE 4				
TOTAL FILINGS FOR TREATMENT GROUPS AND CONTROL GROUP 1969-1976				
(BASED ON DEPARTMENT OF COURT MANAGEMENT RECORDS)				
Year	Twenty-sixth Judicial Circuit Russell County	Thirty-fourth Judicial Circuit Franklin County	Twentieth Judicial Circuit Henry and Houston Counties	Twenty-ninth Judicial Circuit Talladega County
	F I L I N G S			
1969	109	108	248	129
1970	90	118	296	151
1971	163	129	280	189
1972	130	211	324	204
1973	137	242	334	200
1974	216	189	554	207
1975	292	182	640	272
1976	316	110	765	329
8- Year Avg.	182	161	430	210

(b) Nature of Treatment

The nature of the treatment was similar for all three circuits. The E-4 program was developed and is funded under the assumption that supportive personnel hired with the funding can perform duties that otherwise would fall under the responsibility of the chief prosecutor. Therefore, the district attorneys who receive the funding for supportive personnel have more time to devote to prosecutorial proceedings than they would otherwise and thus should increase their efficiency.

Although each of the district attorneys in the judicial circuits under study has expended the E-4 appropriations to hire different types of supportive personnel, all have taken the same basic approach to improving prosecutorial efficiency in their jurisdictions. The district attorney office in the Twenty-sixth Judicial Circuit, Russell County, has expended E-4 funds to hire a secretary, an assistant district attorney, a trial coordinator/investigator, and an administrative assistant. The prosecution for the Thirty-fourth Judicial Circuit, Franklin County, used the E-4 funds to hire a trial coordinator/investigator and a secretary. A trial coordinator/investigator, an assistant district attorney, and a secretary were hired with the funds appropriated to the district attorney office in the Twentieth Judicial Circuit, Henry and Houston counties. (The budgets for each of these circuits are included in Appendix A, page 82).

(2) Control Group

The control group selected for the study is the Twenty-ninth Judicial Circuit, Talladega County. This circuit was selected as the control group for two reasons. First, the ex post facto staggered time

series design requires that the control group for the study not receive any ALEPA E-4 funding for support personnel during the observation period. E-4 funding for support personnel in the Twenty-ninth Judicial Circuit began in 1977, and therefore the district attorney office in this circuit was receiving no E-4 support during the observation period.\* The second reason this circuit was selected as the control group is that it corresponds to the treatment groups in terms of location (Figure 2, page 15), population size (Table 3, page 14), and caseload totals (Table 4, page 16).

b. Observation Period

The first year any treatment group under observation received E-4 funding was 1972. The observation period therefore is begun in 1969 to allow at least three years of pre-treatment data to be collected for all the treatment groups. The observation period is concluded in 1976. This framework allows at least three years of post-treatment data to be collected for all of the treatment groups.

B. VARIABLES TO BE CONSIDERED

The evaluation is designed to assess the impact of the E-4 funding in terms of a specified set of desirable outcomes. The treatment, E-4 funding, is the independent variable, while the desirable outcomes are the dependent variables. Specific dependent

---

\*Late in the evaluation effort the evaluation staff discovered that the district attorney office in the Twenty-sixth Judicial Circuit had in fact received E-4 funding in 1976, the last year in the observation period. This grant funded one secretary only, however, and thus was not comparable to the funding received by the treatment groups. Therefore the evaluation staff decided this circuit still qualified as a control group.

variables are reduction in case backlog; reduction in trial delay; and an increase in successful prosecution. These variables are derived from objectives a, b, and c, respectively, of Project 1 of the E-4 Program.

In order to assess whether the stated objectives of the E-4 Program have been attained, the evaluator has established measurement criteria for each of the three dependent variables. The measurement criteria are adjusted annual backlog, which applies to objective a; expeditious prosecution, which applies to objective b; and effective prosecution, which applies to objective c.

A fourth dependent variable, prosecutorial efficiency, is used to assess whether Project 1 of the E-4 Program has achieved its stated goal of maintaining high prosecutorial efficiency in a time of increasing workloads and responsibilities by providing supportive personnel to the prosecution. This variable is an index derived by combining the results of the variables for expeditious prosecution and effective prosecution.

The following sections contain the operational definitions of the variables adjusted annual backlog, expeditious prosecution, effective prosecution, and prosecutorial efficiency.

#### 1. ADJUSTED ANNUAL BACKLOG

The adjusted annual backlog is a measure of case backlog based on the total number of cases pending at the end of the calendar year that have had sufficient time to pass through the judicial system. The Recommended Standards for Criminal Procedures for the State of Alabama, which is now before the State Supreme Court for adoption,

lists 210 days as the maximum limit for the complete adjudication of a case from arrest to disposition.\* This 210-day standard is probably the ideal measure of what constitutes sufficient time for adjudication in Alabama. However, the way the necessary data are recorded routinely--with a separate form for arrests, indictments, and dispositions--made it impossible for the evaluator to use this standard given the resource limitations of this study. Moreover, tracing all cases from arrest to disposition would result in some unnecessary data collection. For example, many cases are eliminated from the judicial process before they reach the grand jury, and others are eliminated at the grand jury stage by "no bill" decisions; neither group of cases contributes to the backlog. Therefore the evaluation staff devised a standard for sufficient time from indictment to disposition, a stage less difficult to trace than that of arrest to disposition. This standard was derived by combining the federal court standards from the Speedy Trial Act of 1974 with the one from the Recommended Standards for Criminal Procedures for the State of Alabama.

As of July 1, 1977, the Federal Speedy Trial Act requires federal district courts to dispose of all criminal cases within 165 days from the time of arrest. This act sets 45 days between arrest and indictment and 120 days between indictment and disposition as maximum time limits for the broad stages in case processing. The Recommended Standards for Criminal Procedures in Alabama, however, does not break

---

\*This interpretation of the proposed standards was made by the ALEPA evaluation staff after consulting with Bob McCurdy at Continuing Legal Education at the University of Alabama, a member of the committee submitting the proposed standards.

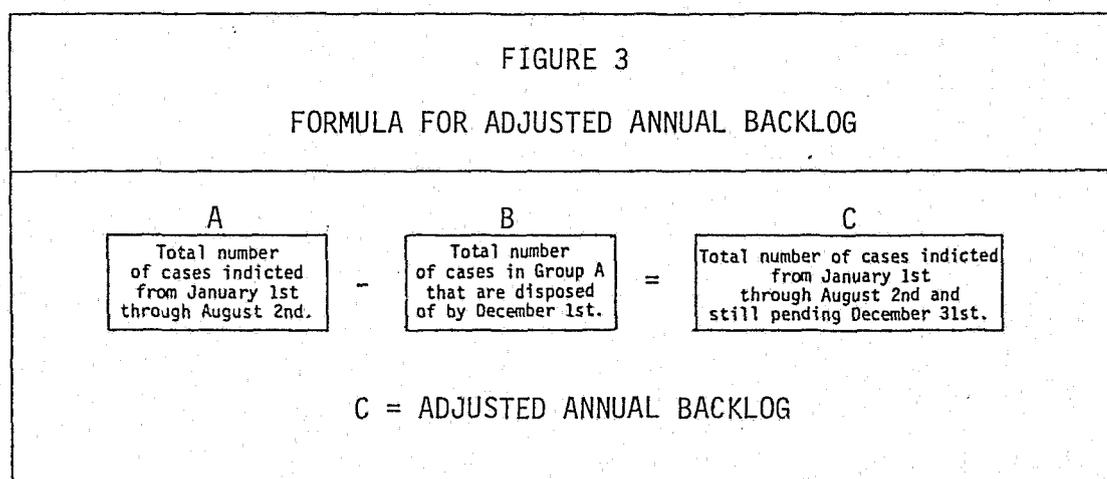
down its 210-day standard for arrest to disposition into standards for arrest to indictment and indictment to disposition. Therefore, for the purposes of this evaluation the limit for the time period between indictment and disposition was established by allowing the same proportion of days for this stage of the adjudication process in Alabama as is allowed in the federal district courts. The evaluator applied the following procedure to calculate the maximum time limit for indictment to disposition used in this report:

<u>Federal Court System</u>	<u>Alabama Court System</u>
$\frac{\text{Indictment to Disposition (120 days)}}{\text{Arrest to Disposition (165 days)}}$	$\frac{\text{Indictment to Disposition (X days)}}{\text{Arrest to Disposition (210 days)}}$
$\frac{(120 \text{ days})}{(165 \text{ days})} = \frac{(X \text{ days})}{(210 \text{ days})}$	

X = 152 days for the maximum time limit between indictment and disposition in Alabama trial courts

This procedure yielded a sufficient time frame of 152 days from indictment to disposition in Alabama. The sufficient time frame is used to project a more accurate measure of case backlog than the traditional method of examining the number of cases pending at the end of the calendar year allows. The number of cases pending at the end of the year is not an accurate reflection of case backlog because it includes all cases not disposed of by December 31st regardless of when the cases were filed or indicted. Using this method a case that received a true bill from a December grand jury and was not disposed of by the end of the calendar year would be considered a backlogged case. Such a case, however, should be considered simply "pending," in that sufficient time has not yet passed for it to be part of a backlog.

The sufficient time concept is instrumental to calculating an adjusted annual backlog. The adjusted annual backlog is a more accurate measure of the backlog for a given calendar year than is the traditional measure of total pending cases. It is calculated by taking the total cases indicted from the beginning of a year through August 2nd--the date that leaves 152 days or sufficient time for adjudication--and subtracting from it those cases in that group which were carried through to final disposition by the end of the year (Figure 3). This procedure yields those cases that were indicted at a point in the year that allowed sufficient time for disposition within the year and yet were left pending on December 31st. It is these cases that constitute the adjusted annual backlog. Those cases indicted after August 2nd do not contribute to the backlog for a given calendar year. Such cases are either carried through to final disposition prior to the end of the year or they are left pending on December 31st without a full 152 days having passed from the time of indictment and thus not yet in violation of the sufficient time standard. Regardless, then, these cases eliminate themselves from backlog considerations for a given calendar year.



The procedure for examining adjusted annual backlog does not reflect a cumulative, year-to-year backlog since it makes no attempt to trace through to disposition cases that are indicted after August 2nd of each year. There are two reasons for looking at the adjusted annual backlog instead of a cumulative backlog. First, the evaluator is primarily interested in measuring the prosecutorial staff's ability to control backlog each year and therefore is concerned with the total indictments in a given year that eventually are classified as backlogged. For this reason there is no need to assess cumulative backlog over a period of years.

Secondly and most importantly, data collection constraints necessitate a practical means of assessing backlog. Time and resources do not allow the evaluator to trace every case through to final disposition. By restricting backlog considerations to a measure of the backlog acquired during a given calendar year, the evaluator can compute a backlog from records for a single calendar year without having to follow every case through records spanning a number of years.

The ex post facto staggered time series design attempts to establish the backlog trend within each circuit as a basis for comparing backlog trends among circuits. The adjusted annual backlog provides the measure necessary to accomplish this trend analysis. Through comparisons of the adjusted annual backlog trends for the treatment groups and the control group, and through comparisons of the adjusted annual backlog trends for the pre-treatment and post-treatment periods within treatment circuits, the evaluator examines the data collected for evidence of backlog reduction as a result of E-4 funding.

## 2. EXPEDITIOUS PROSECUTION

The expeditious prosecution variable is based upon a sample of cases taken from the criminal court dockets in each of the circuits under study. Information from the docket sheets concerning the date of the defendant's arrest and the date of final disposition of the case is used to determine whether cases are moving through to final disposition with fewer delays, as is called for by objective b for Project 1 of the E-4 Program.

The Recommended Standards for Criminal Procedures establishes a maximum time limit of 210 days for the period between arrest and disposition. This standard is used to classify the sample cases collected for the expeditious prosecution variable.\*

Three categories are used to indicate gradations of expeditiousness. The first category is for cases that move from arrest to disposition within the 210-day limit; the second one is for cases whose arrest-to-disposition times exceed the standard but are less than a year; and the third is for cases whose times exceed a year. These categories are designated simply Category I, Category II, and Category III, with Category I being the highest expeditious prosecution rating and Category III, of course, being the lowest (Table 5, page 25).

---

\*The time limit established by these standards actually refers to the time limit between arrest and trial. However, for the purpose of this evaluation, the time limit will refer to the period between arrest and disposition. There are two reasons for using this variation of the standard. First and most importantly, the information that appears on the docket sheets only lists the date of disposition, not the date the trial began. Also, since a trial typically lasts only a few days, the use of this variation of the standard does not overly distort the overall estimate of the time required for prosecution.

TABLE 5 EXPEDITIOUSNESS CLASSIFICATIONS		
Classification	Minimum Number of Days	Maximum Number of Days
Category I	--	210
Category II	211	365
Category III	366	366+

The evaluator examines the expeditiousness variable by determining the proportion of sample cases in each category for every circuit over the entire observation period and comparing the trends for these proportions. Trends are compared on a pre-treatment versus post-treatment basis within treatment circuits and on a treatment group versus control group basis among circuits. Because sample data is used for the analysis of this variable, the evaluator must rely on the chi-square significance test to determine whether a change observed in the sample data is likely to have occurred in the general caseload. Using these methods the evaluator attempts to establish whether E-4 funding has resulted in the achievement of the E-4 objective of a reduction in prosecutorial delays.

### 3. EFFECTIVE PROSECUTION

Since it is an objective of the E-4 Program not only to encourage expeditious prosecutions but also to promote effective prosecutions, it is important to assess prosecution results as well as the dispatch

with which cases move. The effective prosecution variable deals with prosecution results.

The principal source of data for the effective prosecution variable is the sample of criminal court cases taken for the expeditious prosecution variable. Information from the docket sheets concerning the original charge against the defendant, the type of disposition, and the outcome is used to determine the effectiveness of the prosecution efforts.

For the purposes of this evaluation, all cases fall into one of three categories: effective prosecution, non-effective prosecution, and other (Table 6). Effective prosecution efforts consist of cases that receive one of the following convictions: guilty verdict from a jury, a guilty verdict from the judge, or a guilty plea to the

TABLE 6 EFFECTIVENESS CLASSIFICATIONS	
Classification	Decision
Effective Prosecution	Jury Trial/Guilty Judge Trial/Guilty Guilty Plea to Original Charge
Non-effective Prosecution	Jury Trial/Innocent Judge Trial/Innocent Demurrer Dismissal
Other	Pending Not Prossed Guilty Plea to Lesser Offense

original offense. Non-effective prosecution efforts consist of those cases that are disposed of in the following manner: a verdict of not guilty from a jury, a verdict of not guilty from a judge, a demurrer, or a dismissal.

Because only the prosecutor is in a position to judge the strength of the state's case against a defendant, no attempt is made to comment on the cases that are not processed by the prosecution or those for which a guilty plea to a lesser charge is entered. These decisions place a case in the category "other." This category also includes any cases that are pending at the time of the study.

The evaluator examines the effective prosecution variable similarly to the expeditious prosecution variable, by determining the proportion of sample cases in each category for every circuit over the entire observation period and comparing the trends for these proportions. Trends are compared on a pre-treatment versus post-treatment basis within treatment circuits and on a treatment group versus control group basis among circuits. Because sample data is used for the analysis of this variable, also, the evaluator must rely on the chi-square significance test to determine whether a change observed in the sample data is likely to have occurred in the general caseload. Using these methods the evaluator attempts to establish whether E-4 funding has resulted in the achievement of the E-4 objective of an increase in effective prosecutions.

#### 4. PROSECUTORIAL EFFICIENCY

By combining the measures for expeditious prosecution ( $X_{Exp}$ ) and effective prosecution ( $X_{Eff}$ ), the evaluator develops an index indicating

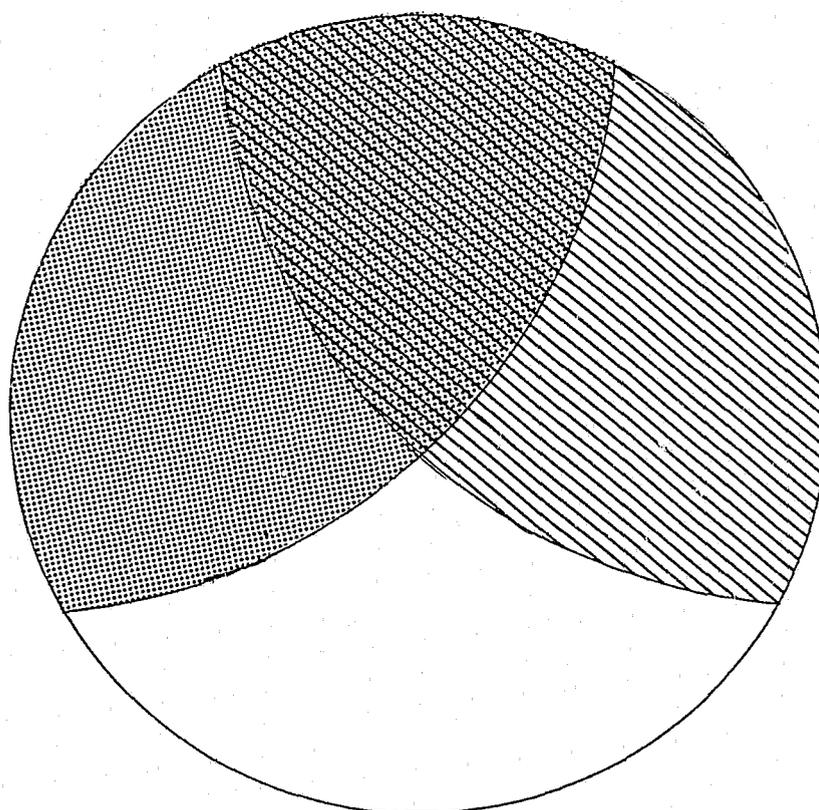
the degree of prosecutorial efficiency. The index provides a numerical indicator of efficiency that can be used to compare the pre-treatment performance of a prosecutor with the post-treatment performance in terms of the E-4 goal of maintaining high prosecutorial efficiency in a time of increasing workloads.

The index is developed by collapsing the expeditious and effective prosecution variables into dichotomous categories. Under the expeditious prosecution category, cases are classified as either being disposed of within the 210-day standard or exceeding the established time limit. Classification of cases under the effective prosecution category are broken into effective and not effective, with the dispositions from both the non-effective and other categories of the effective prosecution variable going into the not effective category.

Dispositions of cases are placed into one of four prosecutorial categories: (1) both expeditious and effective ( $X_{EXP}/X_{EFF}$ ); (2) expeditious but not effective ( $X_{EXP}$ ); (3) effective but not expeditious ( $X_{EFF}$ ); or (4) neither expeditious nor effective (Figure 4, page 29).

Because it is important for prosecutors to effectively prosecute a case (as defined in the effective prosecution variable) in addition to disposing of that case expeditiously (as defined in the expeditious prosecution variable), those cases that meet both of these criteria contribute most significantly to the prosecutorial efficiency index. Those cases that meet only one of the criteria (expeditiousness or effectiveness) are included in the index also, but these cases do not contribute as significantly to the efficiency rating as do those that meet both. The cases that are disposed of within the 210-day time

FIGURE 4  
THE FOUR DISPOSITION CATEGORIES  
FOR THE PROSECUTORIAL EFFICIENCY INDEX



-  " Dispositions that were both expeditious and effective prosecutions.
-  " Dispositions that were expeditious but not effective prosecutions.
-  " Dispositions that were effective but not expeditious prosecutions.
-  " Dispositions that were neither expeditious nor effective prosecutions.

limit ( $X_{Exp}$ ) but are not classified as an effective prosecution are added to those cases that are considered effective prosecutions ( $X_{Eff}$ ) but have not been disposed of within 210 days. The proportion of the total cases that meet only one of the criteria are multiplied by 50% and added to the proportion of total cases that meet both of the criteria ( $X_{Exp/Eff}$ ). The formula for this computation is as follows:

$$\frac{X_{Exp/Eff} + 0.5(X_{Exp} + X_{Eff})}{\text{Total Sample}} = \text{Prosecutorial Efficiency Index}$$

A prosecutorial efficiency index is computed for each circuit studied for every year in the observation period. The trends for the efficiency indexes are compared on a pre-treatment versus post-treatment basis within treatment circuits and on a treatment group versus control group basis among circuits. Through these comparisons of efficiency index trends the evaluator attempts to establish whether E-4 funding has resulted in achievement of the E-4 goal of maintaining high prosecutorial efficiency in a time of increasing workloads.

#### DATA COLLECTION

The evaluation staff believes that the most accurate and reliable information is obtained by collecting data first hand. Therefore, the raw data for this report were collected by the evaluation staff from original records during visits to the circuits being studied. Time and resources did not permit the staff to trace each individual case through the judicial process, so operational definitions, data collection procedures, and analytical techniques had to be devised to eliminate the need of following each case filed in each circuit.

## 1. DATA COLLECTION FOR ADJUSTED ANNUAL BACKLOG

By using an indirect method of computation for the adjusted annual backlog, the evaluator did not have to trace any cases individually. From the grand jury reports the evaluator obtained the total number of true bills returned by the grand jury between January 1st and August 2nd. From the docket sheet, which indicates the date of indictment as well as the date of disposition, the evaluator obtained the number of cases disposed of by December 31st that were also indicted between January 1st and August 2nd. Subtracting the latter figure from the former yielded the adjusted annual backlog. This procedure was a practical means of data collection for backlog considerations given the kinds of records that the circuits keep on a routine basis.

## 2. DATA COLLECTION FOR REMAINING VARIABLES

To avoid tracing each case individually for information needed to assess expeditious prosecution and effective prosecution, the evaluation staff employed a random sampling procedure supplemented with a chi-square test for significance.

### a. Sampling Procedure

For the data necessary for the expeditious prosecution and effective prosecution variables, a sample of cases was selected from the criminal court docket in each of the four circuits under study. Since these variables were nominal measures, the chi-square test for significance was chosen as an analytical method for determining whether trends observed in the sample data were valid for the entire population of cases.

Because the chi-square is used as an analytical technique, the sampling procedure used had to meet two of the assumptions required by this test: an adequate sample size and a random sampling process. After careful consideration the evaluator concluded that a sample of 50 criminal court cases per year fulfilled the requirement of an adequate sample size for this study. Two justifications are offered to support this conclusion. First of all, the chi-square test requires a minimum of five units in each cell. A sample size of at least 50 is considered sufficiently large to produce the desirable cell size.\*

The second justification for a sample size of 50 is that it was the largest sample size manageable considering the time constraints for the study and the resources available for data collection. A pilot study was conducted in two of the four judicial circuits to determine the availability of data and the amount of time required to collect it. On the basis of this pilot study, the evaluator concluded that a sample size of 50 cases per year for the eight years observed would take two people two days of concentrated data collection efforts to gather the needed information. Since data was to be collected at five different locations (the Twentieth Judicial Circuit is a two-county jurisdiction and required data collection at each of the county seats), a total of approximately 10 days of data collection was to be required. With the limited resources and personnel of the evaluation unit, any larger data collection effort would have been unmanageable.

---

\*Kul B. Rai and John C. Blydenburgh, Political Science Statistics, (Boston, Massachusetts: Halbrook Press, Inc., 1973), page 156.

In order to fulfill the requirement of a random sample, a systematic random sampling procedure was used. The systematic random sampling procedure is equivalent to simple random sampling when the clusters resulting from the systematic selection display the same variance as the population from which the sample is selected. The procedure for recording the items which form the data base for this study ensures that the variance requirement is met. Because of the random nature by which cases enter the judicial system, and the non-systematic procedure for docketing these cases once they enter, a systematic sampling procedure should be a random selection that also results in clusters with a substantial amount of variance.

The systematic random sampling procedure used in this study necessitated computing the systematic interval  $K$ . It is determined by dividing the sampling frame  $Q$  (the total number of cases disposed of from the criminal court docket) by the desired sample size  $P$  (50 for this study):

$$K \text{ (systematic interval)} = \frac{Q}{P}$$

With the systematic sampling procedure, every  $K$ th case from the sampling frame is chosen for inclusion in the sample. To ensure against any possible bias in this method, the researcher selects the first case at random and then includes every  $K$ th case thereafter.

The systematic sampling procedure was used for data collection in all circuits. In the Twentieth Judicial Circuit, however, a circuit with a two-county jurisdiction, a sample of 20 cases was collected from Henry County in addition to the sample of 50 cases gathered in Houston County.

b. Chi-Square Significance Test

The chi-square significance test is used to rule out associations between variables in the sample of criminal cases that may not represent genuine relationships in all the cases on the criminal court docket. This test of significance indicates the likelihood that a relationship observed in the sample data is caused by normal sampling error. If the observed relationship cannot reasonably be attributed to sampling error, however, then the evaluator is able to assume that the same relationship exists between the variables in the population as between those that are observed in the sample data.

The chi-square significance test is used to examine the association of pre-treatment and post-treatment periods with regard to expeditious prosecution. For this purpose the contingency table is as follows:

PRE-TREATMENT	POST-TREATMENT
Category I	Category I
Category II	Category II
Category III	Category III

A second chi-square is used to assess the association between pre-treatment and post-treatment periods with regard to effective prosecution. The contingency table for this operation is depicted like this:

PRE-TREATMENT	POST-TREATMENT
Effective	Effective
Non-effective	Non-effective
Other	Other

In the analysis of each circuit, the treatment year (year funding went into effect) is included in the dichotomous category of post-treatment.

The chi-square significance level chosen for these 3 x 2 contingency tables (with two degrees of freedom) is 0.01.

In summary, the use of the chi-square test enables the evaluator to infer whether a trend observed in sample data is representative of the trend in the general population of cases. Moreover, within each circuit the evaluator is able to examine the pre-treatment and post-treatment periods with regard to the expeditious prosecution variable and the pre-treatment and post-treatment periods with regard to the effective prosecution variable.

c. Coding Techniques

A coding scheme was used to convert the data collected from the docket sheets for the expeditious prosecution and effective prosecution variables into an appropriate form for computer-assisted analysis. (The coding scheme is included in Appendix B, page 93).

D. LIMITATIONS AND ASSUMPTIONS OF THIS EVALUATION

A staggered time series design combines the strongest elements of the control group - treatment group design and pre-test - post-test design, and therefore is an excellent tool for addressing the issue of causality. The only practical means of employing this design for the evaluation of Project 1 of the E-4 Program, given the magnitude of the program, the limited resources for the evaluation, and the need for prompt results, was to conduct the study on an ex post facto

basis. The evaluation staff, therefore, developed the ex post facto staggered time series design.

It should be stressed that despite the many advantages of this design, its ex post facto nature limited the evaluator in terms of the identification of variables and the development of measurement criteria. These were restricted in two ways: by the fact that the objectives and goals had to be interpreted retrospectively and by the types of data that had been maintained during the observation period. These two restrictions affected the defining of each of the variables: adjusted annual backlog, expeditiousness, effectiveness, and efficiency.

The traditional measurement criterion for considerations of backlog reduction is total cases pending at the end of the year. This criterion was rejected by the evaluator for two reasons. First, included in a pending cases figure are both cases that have not had sufficient time to pass through the system and cases that actually entered the backlog in previous years. Neither group should figure into backlog considerations for a given year. Also, in 1971 the Alabama Supreme Court provided supernumerary judges for a statewide effort to clear the docket. This special effort would have stood as a rival cause to E-4 funding had pending cases alone been used in backlog considerations.

Therefore the evaluator decided to design a backlog measure based on the number of cases pending at the end of the year that both had been indicted after January 1st and had had sufficient time to move through to disposition. The information necessary to tabulate

the adjusted annual backlog was available on the grand jury reports and docket sheets.

Also, central to the variable adjusted annual backlog is an interpretation of the type of reduction implied in the objective "to reduce case backlog." The adjusted annual backlog reflects an absolute number of cases. Consequently, a circuit must increase its total dispositions more rapidly than its indictments are increasing in order to reduce the adjusted annual backlog. Or, to put it another way, if in a given year dispositions double while indictments triple, the adjusted annual backlog shows an increase.

With the variable adjusted annual backlog, then, the evaluator has chosen to interpret reduce in a strict sense. There are two justifications for this decision. First of all, that caseloads are increasing is an assumption of the E-4 Program; were caseloads stable the program would either not exist or be defined otherwise. Therefore, an assessment of an objective "to reduce backlog," the evaluator believes, should be based on a measure that shows an absolute reduction in backlog. Secondly, if it might be argued that the adjusted annual backlog as defined in this study is insensitive to dramatic increases in indictments, this factor is balanced by the expeditiousness variable. This variable measures the proportion of cases moving from arrest to disposition within 210 days in terms of a sample of all the dispositions listed on the court docket sheet and thus serves as a general indicator of the prosecution's ability to improve the management of caseload in view of rising indictments.

The objective to reduce court delays was interpreted retrospectively as a desire for decreasing the period from arrest to disposition rather than simply lowering the total number of delays per year. This interpretation necessitated defining a measure for expeditiousness. Since no standard has been adopted in Alabama, the evaluator had to choose one from various proposed standards. Though the 210-day standard used for the expeditiousness variable was intended for the period from arrest to the beginning of the trial, the data most easily available pertains to the period for arrest to final disposition. The evaluator had to use that data as a matter of practicality.

Also, the evaluator is aware that many court delays are initiated by the defense: it is generally to the prosecution's advantage and its desire to bring a case to court as soon as possible. To distinguish between the delays initiated by the prosecution and the defense, however, was infeasible. Expeditiousness, therefore, is discussed throughout this report as an aim and responsibility of the prosecution.

The analysis of the objective to increase successful prosecutions called for an interpretation of what constitutes an effective prosecution. Almost any system of classifying dispositions results in ambiguous categories; the prosecution may perceive a certain decision as effective in one instance whereas it would not for another case. The evaluator decided therefore to define effective prosecutions stringently so as to minimize the effect of ambiguous categories. Guilty verdicts by judge trial or jury trial, whether to the original charge or not, however, were classified as effective prosecutions. Also, as a test the evaluator analyzed a second set of data with the ambiguous

category guilty plea to a lesser offense classified as effective. The results of this analysis did not show an appreciable advantage over the classification system the evaluator chose to use.

The overall goal of Project 1 of the E-4 Program is to maintain high prosecutorial efficiency. Since this goal was not defined in measurable terms at the outset of the program, the evaluator was left with the task of interpreting and defining it retrospectively. Considering all factors that could contribute to prosecutorial efficiency, the data available, and the measures developed for the E-4 Program objectives, the evaluator chose to measure prosecutorial efficiency with a numerical index that combined both the expeditiousness and effectiveness variables. The measure's main limitation is that it excludes factors other than prosecutorial expeditiousness and effectiveness and is therefore a restricted measure. The measure is a single numerical indicator of efficiency, however, and thereby provides a means of determining trends in efficiency during the observation period. Moreover, the efficiency index is weighted toward dispositions that meet the criteria for both expeditiousness and effectiveness. In terms of logic, these dispositions are the most efficient.

All findings, conclusions, and recommendations of this study depend on the aforementioned measures and interpretations of the objectives.

Also, the reader should be aware of a limitation in comparing individual data points among circuits under observation. Four circuits are used so that the evaluator can control for various validity threats; control for threats is gained by establishing trends within each circuit

and comparing the trends across circuits. It is through the trends that the evaluator is able to discern what change, in terms of the variables, has occurred over the observation period. The trends therefore provide the most valid basis for treatment group-control group comparisons. Any comparisons of individual data points must be made in full recognition of the overall trends. This principle applies to each of the variables considered in this study, and especially to the prosecutorial efficiency index, which is a composite measure based on two other variables.

The evaluator believes that the variables developed for this study are legitimate interpretations and accurate measures of the objectives and goal of Project 1 of ALEPA's E-4 Program. Furthermore, the evaluator believes that the advantages of the ex post facto staggered time-series design in terms of determining causality-- assessing the impact of the program--more than compensates for the limitations this design imposes.

### III. PRESENTATION AND ANALYSIS OF DATA

A separate data presentation and analysis is given for each of the variables examined in this evaluation: adjusted annual backlog, expeditious prosecution, effective prosecution, and prosecutorial efficiency.

#### A. ADJUSTED ANNUAL BACKLOG

Objective a for Project 1 of the E-4 Program is to reduce case backlog. The results from the adjusted annual backlog variable do not indicate a clear-cut reduction in case backlog through E-4 funding. The findings do indicate, however, that the treatment helped district attorneys avoid accelerated increases in backlog when confronted with a rising number of indictments. A clear-cut reduction in case backlog would have been signaled by steady decreases in the adjusted annual backlogs of the treatment groups after program implementation accompanied by either stable or increasing adjusted annual backlogs in the control group. Though the adjusted annual backlogs for the control group fit the anticipated pattern, the trends for the adjusted annual backlogs of the treatment groups are toward increase (Figure 5, page 42). None of the trends for the treatment groups, however, show as dramatic an increase as the trend for the unfunded control group.

Causal assertions are most strongly supported by the ex post facto staggered time series design when the trends observed in treatment groups are similar and the trend observed in the control group is different. Any deviation from this desired result lessens the plausibility of the treatment being the cause of observed trends. Although the adjusted annual backlog trends do not form an ideal pattern, the

TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY, 1969-1975 THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY, 1969-1976

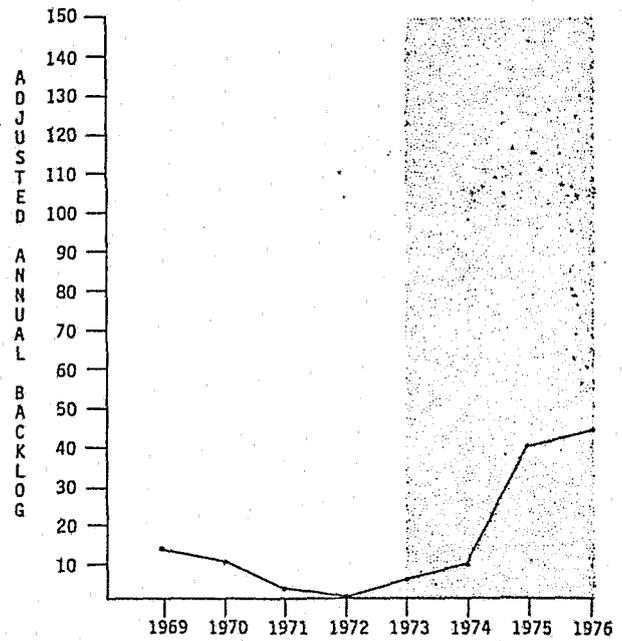
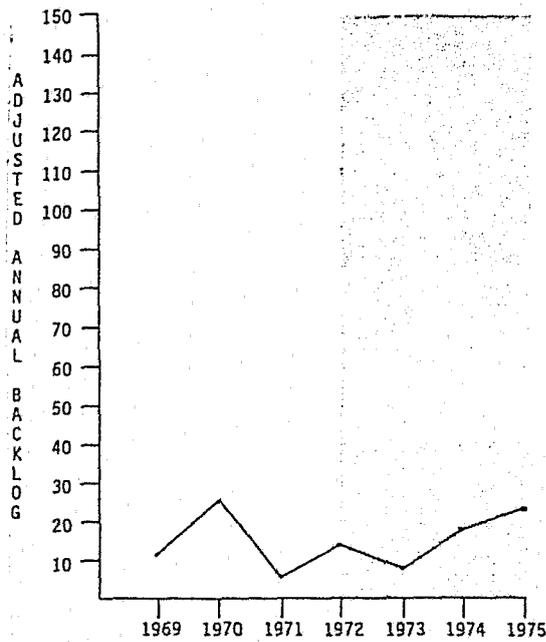
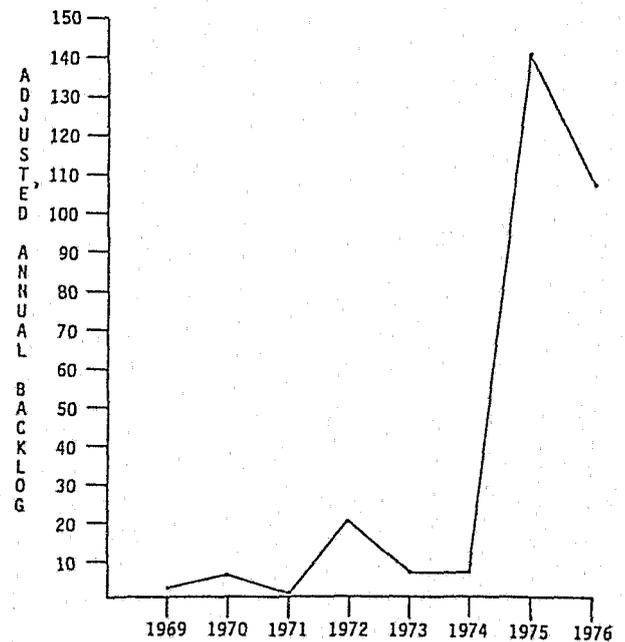
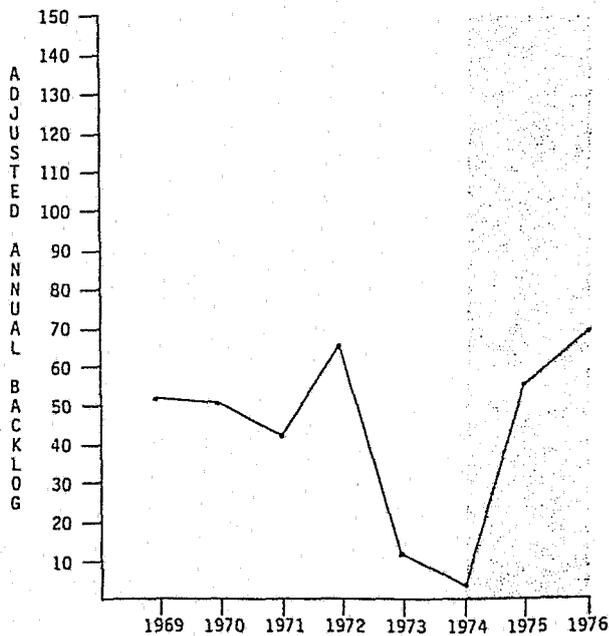


FIGURE 5

THE TRENDS FOR THE ADJUSTED ANNUAL BACKLOG FOR ALL CIRCUITS STUDIED

Treatment Period

TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES, 1969-1976 TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, 1969-1976



evaluator still analyzed the findings. The inferences derived from these analyses, however, should be regarded more cautiously than would be necessary were they based on ideal data trends.

The first of the three treatment groups to receive E-4 funding was the Twenty-sixth Judicial Circuit, Russell County. Its year of program implementation was 1972, and thus for the observation period in this study its pre-treatment years are 1969-1971 and its post-treatment years are 1972-1975.\* For pre-treatment 1969, 1970, and 1971, the adjusted annual backlogs were 12, 26, and 6, respectively; for 1972, 1973, 1974, and 1975, the adjusted annual backlogs were 14, 9, 19, and 25 (Table 7). Thus even though the highest adjusted annual backlog in the observation period came in a pre-treatment year (26 in 1970), the lowest one also preceded the treatment (6 in 1971).

TABLE 7				
ADJUSTED ANNUAL BACKLOG FOR THE				
TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY, 1969-1975				
Period	Year	Indictments January 1st - August 2nd	Dispositions January 1st - December 31st from Indictments January 1st - August 2nd	ADJUSTED ANNUAL BACKLOG
PRE TREATMENT	1969	43	31	12
	1970	62	36	26
	1971	91	85	6

\*The observation period for all other circuits was through 1976. Backlog data was collected for this circuit, however, through 1975 only.

TABLE 7 CONTINUED

P e r i o d	Year	Indictments January 1st - August 2nd	Dispositions January 1st - December 31st from Indictments January 1st - August 2nd	ADJUSTED ANNUAL BACKLOG
P O S T  T R E A T M E N T	1972*	69	55	14
	1973	62	53	9
	1974	57	38	19
	1975	117	92	25
	1976**	--	--	--
<p>*Year of program implementation.</p> <p>**No data collected for this year.</p>				

The treatment does appear, however, to have had a clear impact on the degree of increase in the adjusted annual backlog. Whereas 62 indictments between January 1st and August 2nd resulted in an adjusted annual backlog of 26 in pre-treatment 1970, 62 indictments resulted in an adjusted annual backlog of 9 in post-treatment 1973. The highest adjusted annual backlog for the post-treatment period (25) came the same year as the highest number of January-to-August indictments during the observation period (117). The prosecution staff, then, was able to dispose of more of the cases at hand in the post-treatment years than in the pre-treatment years.

The second treatment group, the Thirty-fourth Judicial Circuit of Franklin County, had its highest adjusted annual backlogs during the

post-treatment period. In the pre-treatment period 1969-1972 the adjusted annual backlogs ranged from 1 to 15; for the post-treatment 1973-1976 they ranged from 6 to 45, increasing every year (Table 8). Though there were a higher number of January-to-August indictments for three of the four post-treatment years than there were for any of the four years in the pre-treatment period (43, 82, and 73 in the post-treatment period versus a high of 28 in the pre-treatment period), increasing indictments alone do not account for the failure to reduce case backlog. In post-treatment 1973, 16 January-to-August indictments resulted in an adjusted annual backlog of 6, whereas in pre-treatment 1972, 25 January-to-August indictments resulted in an adjusted annual backlog of only 1.

TABLE 8				
ADJUSTED ANNUAL BACKLOG FOR THE				
THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY, 1969-1976				
P e r i o d	Year	Indictments January 1st - August 2nd	Dispositions January 1st - December 31st from Indictments January 1st - August 2nd	ADJUSTED ANNUAL BACKLOG
P R E T R E A T M E N T	1969	28	13	15
	1970	25	13	12
	1971	19	16	3
	1972	25	24	1

TABLE 8 CONTINUED

P e r i o d	Year	Indictments January 1st - August 2nd	Dispositions January 1st - December 31st from Indictments January 1st - August 2nd	ADJUSTED ANNUAL BACKLOG
P O S T  T R E A T M E N T	1973*	16	10	6
	1974	43	33	10
	1975	82	41	41
	1976	73	28	45
*Year of program implementation.				

In the third treatment group, the Twentieth Judicial Circuit of Henry and Houston counties, the failure of E-4 funding to establish a clear-cut trend is evidenced by the post-treatment period having both the lowest adjusted annual backlog and the highest. During the pre-treatment period 1969-1973, the adjusted annual backlog ranged from 13 to 67, and during post-treatment 1974-1976 from 4 to 70 (Table 9, page 47). The year of program implementation in this circuit, however, shows a marked reduction in adjusted annual backlog. That year the measure was the low for the observation period despite a higher number of January-to-August indictments than in any pre-treatment year (229 indictments in 1974 versus a pre-treatment high of 196 in 1970).

Moreover, even though the adjusted annual backlog rose in the last two years of the post-treatment period, program implementation appears to have had a clear impact on the degree of increase in this

TABLE 9				
ADJUSTED ANNUAL BACKLOG FOR THE				
TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES, 1969-1976				
P e r i o d	Year	Indictments January 1st - August 2nd	Dispositions January 1st - December 31st from Indictments January 1st - August 2nd	ADJUSTED ANNUAL BACKLOG
P R E T R E A T M E N T	1969	158	106	52
	1970	196	145	51
	1971	181	138	43
	1972	193	126	67
	1973	130	117	13
P O S T T R E A T M E N T	1974*	229	225	4
	1975	271	214	57
	1976	284	214	70
*Year of program implementation.				

circuit, as it did in the circuit for Russell County. In pre-treatment 1969, 158 January-to-August indictments resulted in an adjusted annual backlog of 52, whereas in post-treatment 1975, 271 indictments resulted in a backlog of 57. The pre-treatment high adjusted annual backlog of 67 was the result of 193 January-to-August indictments; in contrast the post-treatment high of 70 resulted from 284.

The control group, the Twenty-sixth Judicial Circuit of Talladega County, had consistently low adjusted annual backlogs through the first six years of the observation period but dramatically high ones the last two years. From 1969 to 1974 the highest adjusted annual backlog was 21, and those for the remaining years were in the 1 to 7 range (Table 10). These adjusted annual backlog figures for the control group compare well with any of those for the treatment groups, whether in pre-treatment or post-treatment periods. In the last two years, however, the adjusted annual backlog rose to 142 and 108. These figures are considerably higher than those for any of the treatment groups at any point in the observation period.

TABLE 10  
ADJUSTED ANNUAL BACKLOG FOR THE  
TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, 1969-1976

P e r i o d	Year	Indictments January 1st - August 2nd	Dispositions January 1st - December 31st from Indictments January 1st - August 2nd	ADJUSTED ANNUAL BACKLOG
N O T R E A T M E N T	1969	64	62	2
	1970	63	57	6
	1971	49	48	1
	1972	55	34	21
	1973	84	77	7

TABLE 10 CONTINUED

P e r i o d	Year	Indictments January 1st - August 2nd	Dispositions January 1st - December 31st from indictments January 1st - August 2nd	ADJUSTED ANNUAL BACKLOG
N O T R E A T M E N T	1974	51	44	7
	1975	211	69	142
	1976	232	124	108

The primary reason for the sharp rise in the control group's adjusted annual backlog was a sharp increase in the January-to-August indictments. Those figures rose to 211 and 232 in 1975 and 1976 whereas the range was 49 to 84 for 1969-1974. The only treatment group with comparable January-to-August indictments those years is the circuit for Henry and Houston counties with 271 in 1975 and 284 in 1976. That the adjusted annual backlogs in 1975 and 1976 were considerably lower for this treatment group than those for the control group supports the conclusion that while the E-4 funding may not have achieved the program objective of reducing backlog in any treatment circuit, it prevented the type of accelerated increase experienced in the control group.

#### B. EXPEDITIOUS PROSECUTION

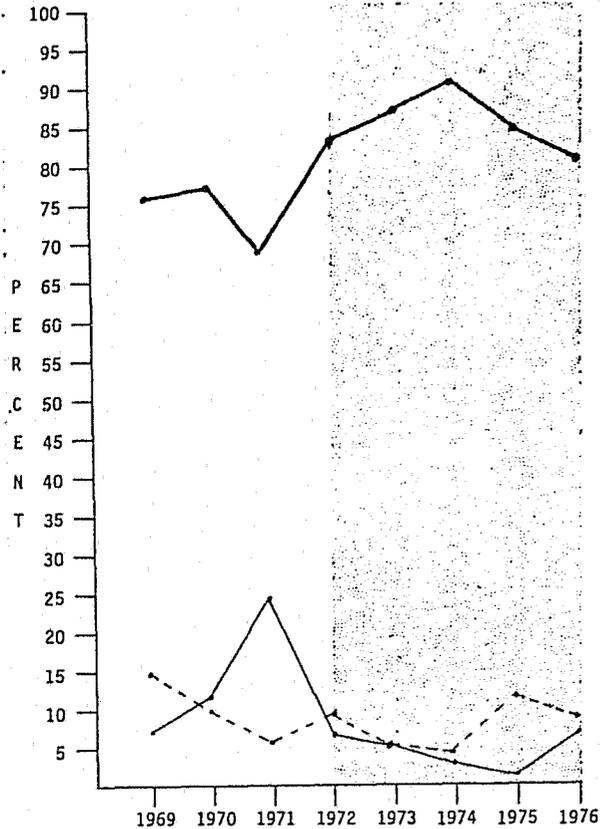
Objective b for Project 1 of the E-4 Program is to reduce the delays in prosecution. The findings from the expeditious prosecution variable indicate that the hiring of supportive personnel had a positive impact on the rate at which cases were disposed of in the circuits

under observation. This causal assertion is based on the observation of similar trends in the treatment groups and a different trend in the control group.

In each of the treatment groups the proportion of cases that were disposed of within the 210-day standard fluctuated significantly prior to the implementation of the E-4 program (Figure 6, page 51). Once the supportive personnel were hired, however, the proportion of cases disposed of within the standard (Category I cases) became stable, and the highest proportion of cases disposed of within the standard came in a post-treatment year. In the control group, on the other hand, the proportion of cases disposed of within the 210-day standard varied greatly throughout the entire observation period. Also, the proportion of cases classified as Category I dispositions was not as high for the control group as it was for any of the treatment groups in those years comprising the various post-treatment periods.

In the Twenty-sixth Judicial Circuit, Russell County, the E-4 funding increased and stabilized the proportion of criminal cases that were disposed of within the standard. Prior to program implementation, there appears to have been an inverse relationship between the proportion of cases that were disposed of within the standard and those cases that required over a year for disposition (Category III cases). In 1971 Category I dispositions dropped while there was a noted increase in Category III dispositions (Table 11, page 52). After the supportive personnel were hired, however, the proportion of cases in Category I stabilized and the inverse relationship shifted to categories II and III. During 1975 the proportion of cases taking over a year for

TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY, 1969-1976



THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY, 1969-1976

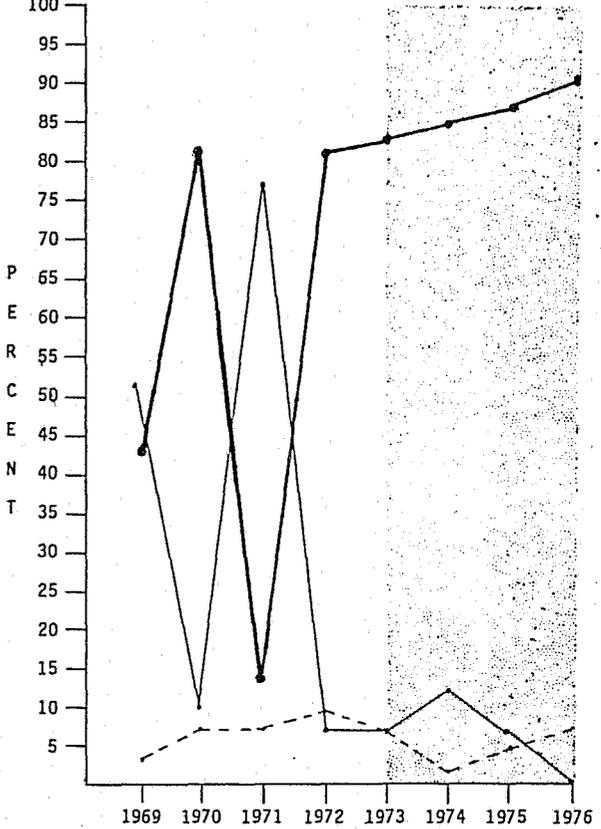
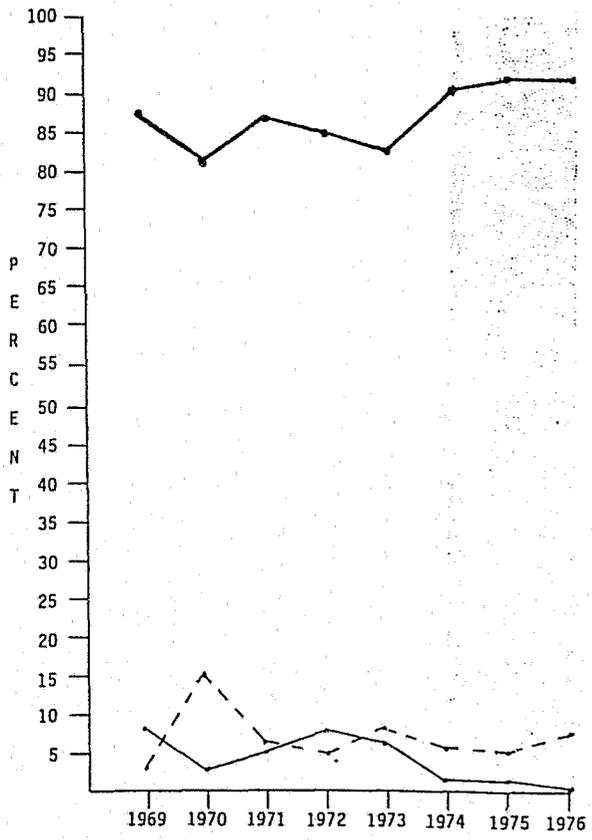


FIGURE 6

THE TRENDS FOR THE PROPORTION OF SAMPLE CASES  
IN EXPEDITIOUSNESS CATEGORIES I, II, AND III FOR ALL CIRCUITS STUDIED

— Category I    - - - Category II    ····· Treatment Period  
 - - - Category III

TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES, 1969-1976



TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, 1969-1976

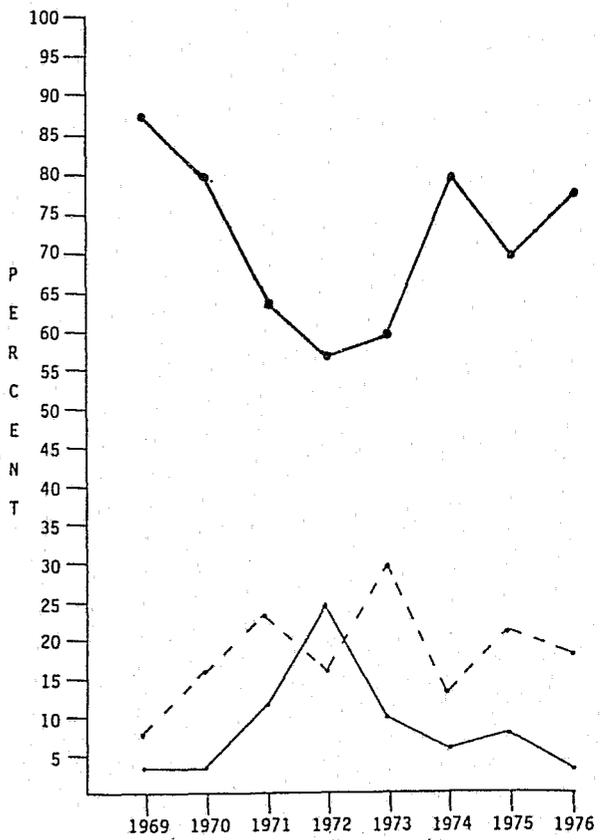


TABLE 11									
NUMBER AND PERCENTAGE OF SAMPLE CASES									
IN EXPEDITIOUSNESS CATEGORIES I, II, AND III FOR THE									
TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY, 1969-1976									
P e r i o d	Year	Category I (Within 210 days)		Category II (211-365 days)		Category III (More than 365 days)		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
P R E T R E A T M E N T	1969	37	77%	7	15%	4	8%	48	100%
	1970	39	78%	5	10%	6	12%	50	100%
	1971	34	69%	3	6%	12	25%	49	100%
P O S T T R E A T M E N T	1972*	38	84%	4	9%	3	7%	45	100%
	1973	44	88%	3	6%	3	6%	50	100%
	1974	40	91%	2	5%	2	4%	44	100%
	1975	41	85%	6	13%	1	2%	48	100%
	1976	41	82%	5	10%	4	8%	50	100%

\*Year of program implementation.

disposition dropped while the proportion of cases classified as Category II increased. It is important to note that the proportion of cases requiring over a year for adjudication dropped substantially once the program was implemented and remained low through the rest of

the observation period (a pre-treatment range of 8% to 25% versus a post-treatment range of 2% to 8%). This performance represents a commendable effort toward expeditiousness on the part of the prosecutorial staff in Russell County. Once the prosecutorial staff assistance was provided, the staff not only disposed of more cases within the 210-day time limit but also reduced the proportion of cases that required over a year for adjudication.

To establish whether the relationship between the E-4 funding and the proportion of expeditious cases in the sample data can be inferred to all criminal cases in Russell County for the period under study, the chi-square test for significance was applied to the sample data. This test indicated that the increase in expeditiousness is statistically significant at the 0.01 level (Table 12). The evaluator therefore concludes that the observed relationship between ALEPA funding and increased expeditiousness can be inferred to the entire criminal court docket in Russell County.

TABLE 12				
CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION				
IN THE TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY				
Expeditiousness Category	Pre-treatment 1969-1971		Post-treatment* 1972-1976	
	No.	Pct.	No.	Pct.
Category I Within 210 days	110	75%	204	86%
Category II 211-365 days	15	10%	20	8%

TABLE 12 CONTINUED

Expeditiousness Category	Pre-treatment 1969-1971		Post-treatment* 1972-1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Category III More than 365 days	22	15%	13	6%
Raw chi-square is 10.66; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				
*The year of program implementation always is included in the post-treatment column of the contingency tables.				

To ensure that the statistical significance noted was not the result of an ongoing trend that initiated in the pre-treatment period, the chi-square test for significance was performed with the years of observation grouped in different dichotomous categories. When the observation period was divided into dichotomous categories using years other than the ALEPA treatment year as the dividing point, the increase in expeditiousness was not statistically significant at the 0.01 level. Therefore the significance is not considered to be a phenomenon that occurred as the result of an ongoing trend that began in the pre-treatment period. (The chi-square tests for significance that were used as controls are included in Appendix C, page 96. The standard error of the estimate was also calculated for the sample data in each circuit and is included in Appendix D, page 101.) The results of these additional tests enable the evaluator to rule out the possibility that a historical trend of increased prosecutorial expeditiousness had begun during the pre-treatment years.

After supportive personnel were hired in the Thirty-fourth Judicial Circuit, Franklin County, the proportion of Category I dispositions

increased and stabilized at a higher percentage than was observed prior to the treatment. Prior to program implementation, there appears to have been an inverse relationship between the proportion of Category I cases and the proportion of Category III cases (Table 13). Category II cases remained relatively stable during the pre-treatment period.

P e r i o d	Year	Category I (Within 210 days)		Category II (211-365 days)		Category III (More than 365 days)		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
P R E T R E A T M E N T	1969	22	44%	2	4%	26	52%	50	100%
	1970	41	82%	4	8%	5	10%	50	100%
	1971	7	14%	4	8%	39	78%	50	100%
	1972	42	82%	5	10%	4	8%	51	100%
P O S T T R E A T M E N T	1973*	41	84%	4	8%	4	8%	49	100%
	1974	40	85%	1	2%	6	13%	47	100%
	1975	38	88%	2	5%	3	7%	43	100%
	1976	45	92%	4	8%	0	0%	49	100%

\*Year of program implementation.

Once the supportive personnel were hired, however, the proportion of Category I dispositions stabilized at a higher proportion than was noted in the pre-treatment period (post-treatment range of 84% to 92% versus a pre-treatment range of 14% to 82%). Category III dispositions remained low once the E-4 program was initiated and only increased at all, by 5%, during 1974. The increase in Category III dispositions in 1974, which is small in comparison to the pre-treatment high increase of 68% in 1971, appears to be the result of a trade-off between categories II and III in that the proportion of dispositions in Category I increased that year. In 1975 and 1976, there was not only an increase in the proportion of dispositions in Category I, but also a reduction in the number of cases that required over a year for adjudication.

The analysis of the data in Franklin County implies that there is a relationship between the ALEPA-funded treatment and the proportion of expeditious cases observed in the sample data. In order to determine whether this inference can be made about all the criminal cases in Franklin County, the chi-square test for significance was applied to the sample data. The test indicated that the increase in expeditiousness is statistically significant at the 0.01 level (Table 14, page 57). The evaluator therefore concludes that the observed relationship between ALEPA funding and expeditiousness can be inferred to the entire criminal docket in Franklin County.

Additional chi-square tests were performed with the years of observation grouped into different dichotomous categories. These two control tests for the Thirty-fourth Judicial Circuit resulted in statistical significance. (See Appendix C, page 96, for the control

TABLE 14				
CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION				
IN THE THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY				
Expeditiousness Category	Pre-treatment 1969-1972		Post-treatment 1973-1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Category I Within 210 days	112	56%	164	87%
Category II 211-365 days	15	7%	11	6%
Category III More than 365 days	74	37%	13	7%
Raw chi-square is 52.80; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

tables.) The statistical significance of the three chi-square tests for the Thirty-fourth Judicial Circuit can be traced to the low proportion of Category I cases in 1971 (14%). This low proportion inflates the value of the chi-square for any classification of the observation years. Despite the failure of the chi-square test to isolate the initial treatment year as the pivotal year in this circuit, however, the evaluator believes the stable trend observed for Category I cases following the E-4 Program implementation indicates that the E-4 Program increased the proportion of expeditious prosecutions in this judicial circuit.

There also appears to be a relationship between ALEPA funding and increased expeditiousness in the Twentieth Judicial Circuit, Henry and Houston counties. In this circuit also the proportion of Category I

dispositions fluctuated prior to the implementation of the E-4 Program. Even though the fluctuation of Category I dispositions was not as accented in this circuit as it was in the two other treatment groups, the E-4 funding nevertheless appears to have had a stabilizing effect on the proportion of cases disposed of within the 210-day standard.

Because the proportion of Category I cases was relatively high in the Twentieth Judicial Circuit prior to program implementation (range of 82% to 88%), the increase in the proportion of dispositions in Category I was not as pronounced as it was in the other treatment groups (Figure 6, page 45). This treatment circuit also differs from the other two in that prior to program implementation, there appears to have been an inverse relationship between Category II dispositions and Category III dispositions rather than between categories I and III.

After supportive personnel were hired in Henry and Houston counties the proportion of Category I dispositions stabilized at over 90%, Category II dispositions at under 8%, and Category III dispositions at under 2% (Table 15, page 59). The prosecutors in Henry and Houston counties did a commendable job of expeditiously prosecuting criminal cases in the Twentieth Judicial Circuit over the post-treatment period.

The chi-square test for significance was used to determine whether the relationship observed in the sample data could be inferred for all criminal cases. Because only two cases total were classified as Category III dispositions during post-treatment years, the cell size for this category was too small to meet the recommended minimum cell size for the chi-square test of five. Therefore, in order to perform the chi-square significance test the evaluator had to collapse categories

TABLE 15									
NUMBER AND PERCENTAGE OF SAMPLE CASES									
IN EXPEDITIOUSNESS CATEGORIES I, II, AND III FOR THE									
TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES, 1969-1976									
P e r i o d	Year	Category I (Within 210 days)		Category II (211-365 days)		Category III (More than 365 days)		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
P R E T R E A T M E N T	1969	60	88%	2	3%	6	9%	68	100%
	1970	56	82%	10	15%	2	3%	68	100%
	1971	61	87%	5	7%	4	6%	70	100%
	1972	58	86%	3	5%	6	9%	67	100%
	1973	59	84%	6	9%	5	7%	70	100%
P O S T T R E A T M E N T	1974*	62	91%	5	7%	1	2%	68	100%
	1975	59	92%	4	6%	1	2%	64	100%
	1976	59	92%	5	8%	0	0%	64	100%
*Year of program implementation.									

II and III into one category. This shift results in a 2 x 2 contingency table. Since relationships between categories are more difficult to validate with a 2 x 2 contingency table than with a 3 x 2 contingency table, the evaluator used 0.05 instead of 0.01 as the level of significance for the sample data from the Twentieth Judicial Circuit.

The chi-square test showed that the relationship between the ALEPA-funded E-4 Program and improved case expeditiousness is significant at the 0.05 level (Table 16). Therefore the evaluator concludes that this relationship applies to all criminal cases in the Twentieth Judicial Circuit as well as to the sample data.

TABLE 16 CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION IN THE TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES				
Expeditiousness Category	Pre-treatment 1969-1973		Post-treatment 1974-1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Category I Within 210 days	294	86%	180	92%
Categories II and III 211-365 days and More than 365 days	49	14%	16	8%
Raw chi-square is 4.76; required chi-square with one degree of freedom is 3.84 at 0.05 level of significance.				

Additional chi-square tests were performed using tables created by dichotomously classifying the observation years with dividing points other than the treatment year. The absence of significant chi-square values for these additional tests rules out the possibility that the significant chi-square value obtained with the pre-treatment and post-treatment classification was the result of a historical trend toward expeditiousness that began before the ALEPA treatment. (See Appendix C, page 96, for the control tables.)

The consistency of the improvement in expeditious prosecutions following E-4 program implementation in the treatment groups is especially noteworthy in view of the case disposition expeditiousness observed in the control group, the Twenty-ninth Judicial Circuit, Talladega County. In contrast to the treatment circuits, the proportion of cases being disposed of within the 210-day standard in the control group never stabilized during the eight-year observation period. For the first year of observation this proportion was 88%, and the last it was 78%; in the middle years it ranged from 58% to 80% (Table 17). The proportion of cases in categories II and III also fluctuated throughout.

P e r i o d	Year	Category I (Within 210 days)		Category II (211-365 days)		Category III (More than 365 days)		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
N O T R E A T M E N T	1969	44	88%	4	8%	2	4%	50	100%
	1970	40	80%	8	16%	2	4%	50	100%
	1971	32	64%	12	24%	6	12%	50	100%
	1972	29	58%	8	16%	13	26%	50	100%
	1973	30	60%	15	30%	5	10%	50	100%

TABLE 17 CONTINUED

P e r i o d	Year	Category I (Within 210 days)		Category II (211-365 days)		Category III (More than 365 days)		TOTAL SAMPLE	
		<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
		N O T R E A T M E N T	1974	40	80%	7	14%	3	6%
1975	35		70%	11	22%	4	8%	50	100%
1976	39		78%	9	18%	2	4%	50	100%

The absence of meaningful trends in the control group's sample data was confirmed by the results of three chi-square tests for significance, tests performed to compare the disposition expeditiousness data for this circuit with the disposition expeditiousness trends of the treatment circuits. By collapsing the control group's observation years into the dichotomous categories used for the treatment circuits' contingency tables, the evaluator created three tables corresponding to the treatment circuits' contingency tables. Chi-square tests for significance then were computed for each grouping.

None of the chi-square values for the control group data were statistically significant (tables 18 and 19, page 63, and Table 20, page 64). The evaluator therefore concludes that no significant changes occurred in the proportion of cases receiving expeditious dispositions in this circuit. This absence of a proportional increase in expeditious dispositions in the control circuit adds additional weight to the conclusion that the increases in expeditiousness achieved in the treatment circuits are related to ALEPA funding.

TABLE 18				
CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION IN THE TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, USING THE OBSERVATION PERIOD DIVISION OF THE TWENTY-SIXTH JUDICIAL CIRCUIT TREATMENT GROUP				
Expeditiousness Category	1969-1971		1972-1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Category I Within 210 days	116	77%	173	69%
Category II 211-365 days	24	16%	50	20%
Category III More than 365 days	10	7%	27	11%
Raw chi-square is 3.40; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

TABLE 19				
CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION IN THE TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, USING THE OBSERVATION PERIOD DIVISION OF THE THIRTY-FOURTH JUDICIAL CIRCUIT TREATMENT GROUP				
Expeditiousness Category	1969-1972		1973-1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Category I Within 210 days	145	72%	144	72%
Category II 211-365 days	32	16%	42	21%
Category III More than 365 days	23	12%	14	7%
Raw chi-square is 3.54; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

TABLE 20				
CONTINGENCY TABLE FOR EXPEDITIOUS PROSECUTION IN THE TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, USING THE OBSERVATION PERIOD DIVISION OF THE TWENTIETH JUDICIAL CIRCUIT TREATMENT GROUP				
Expeditiousness Category	1969-1973		1974-1976	
	No.	Pct.	No.	Pct.
Category I Within 210 days	175	70%	114	76%
Category II 211-365 days	47	19%	27	18%
Category III More than 365 days	28	11%	9	6%
Raw chi-square is 3.46; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

The trend analysis reveals similar patterns of improvement in the proportion of cases that moved through to final disposition within the 210-day standard in the three treatment groups. Statistical tests show that the improvements in expeditiousness revealed in the sample data are true for all criminal cases in the circuits and that the improvements coincided with the implementation of ALEPA-funded programs. These findings apply to all treatment circuits even though the programs began in different years in the different circuits. Finally, the trend analysis and statistical tests for the control group fail to demonstrate a comparable improvement in the expeditiousness with which cases moved to final disposition over the observation period.

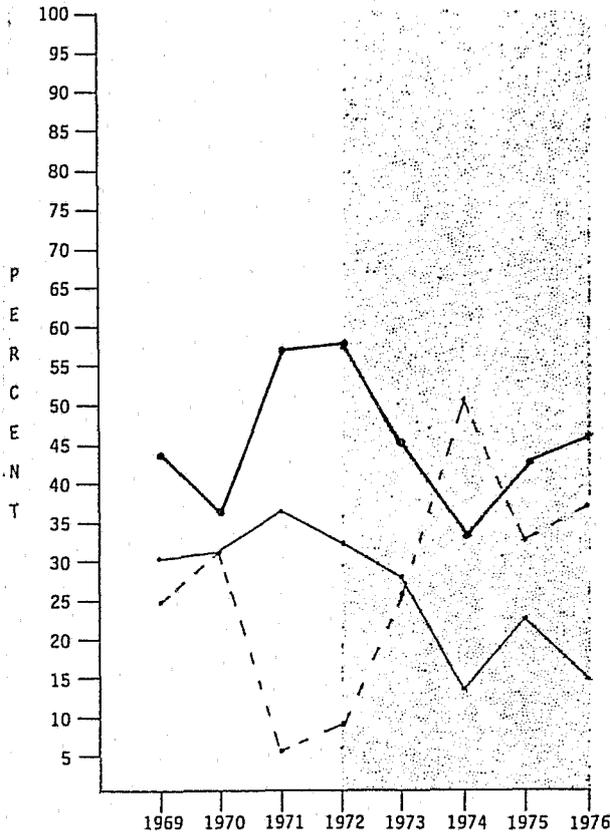
The findings establish a relationship between improved expeditiousness and ALEPA-funded treatments. The use of the ex post facto staggered

time series design enables the evaluator to rule out many competing explanations as causes of the improved expeditiousness. In fact, the evaluator concludes that not only is there a relationship between the ALEPA-funded program and an increase in the proportion of cases reaching disposition within the 210-day standard, but also that the ALEPA-funded program is the most plausible cause of the increase.

### C. EFFECTIVE PROSECUTION

Objective c for Project 1 of the E-4 Program is to increase the rate of successful prosecutions. Because the annual measures of effectiveness reveal no consistent trends among treatment circuits and the pre-treatment and post-treatment contingency tables demonstrate no statistical significance, the evaluator concludes that the ALEPA-funded program did not improve the effectiveness of prosecution in the circuits observed. An improvement in effectiveness would have been signalled by an increasing proportion of effective prosecutions in the treatment circuits after program implementation accompanied by either a stable or decreasing proportion of effective prosecutions in the control group. The trends for the circuits observed do not fit this anticipated pattern (Figure 7, page 66). Nevertheless, the information on effectiveness for each circuit is presented and discussed. The discussion focuses on the breakdown of criminal dispositions for each circuit into the three effective prosecution categories of effective, non-effective, and "other" as they apply to each circuit. Since statistical significance was not present in the effectiveness data collected for any of the treatment circuits, observations about the types of dispositions in each circuit apply only to the sample data and are

TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY, 1969-1976



THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY, 1969-1976

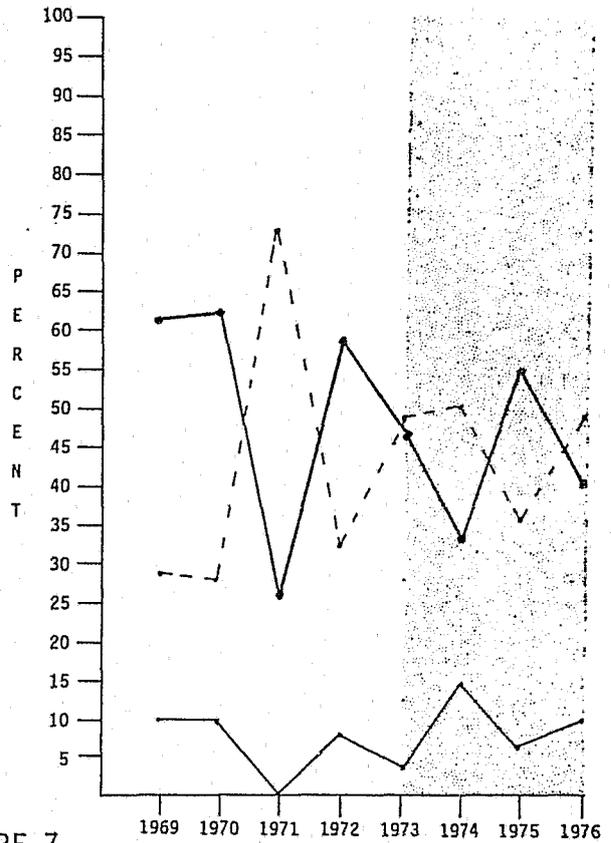
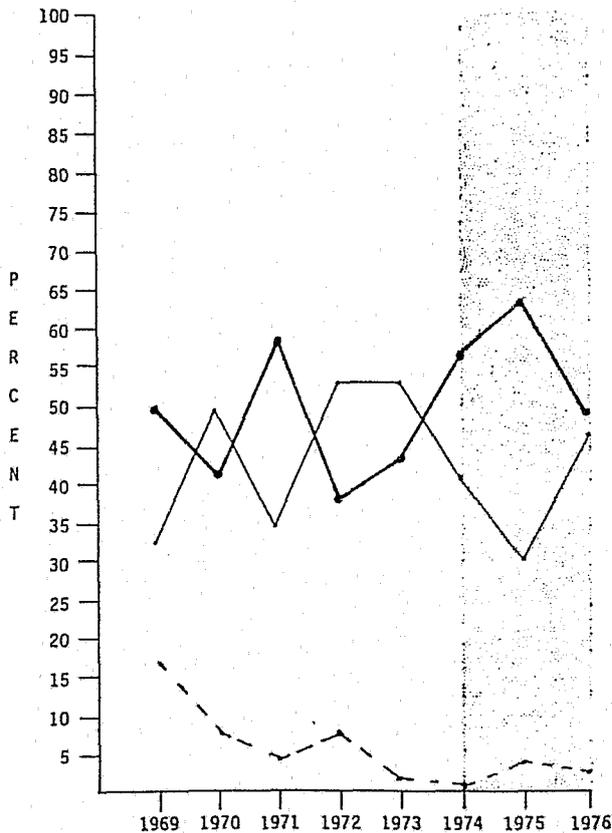


FIGURE 7

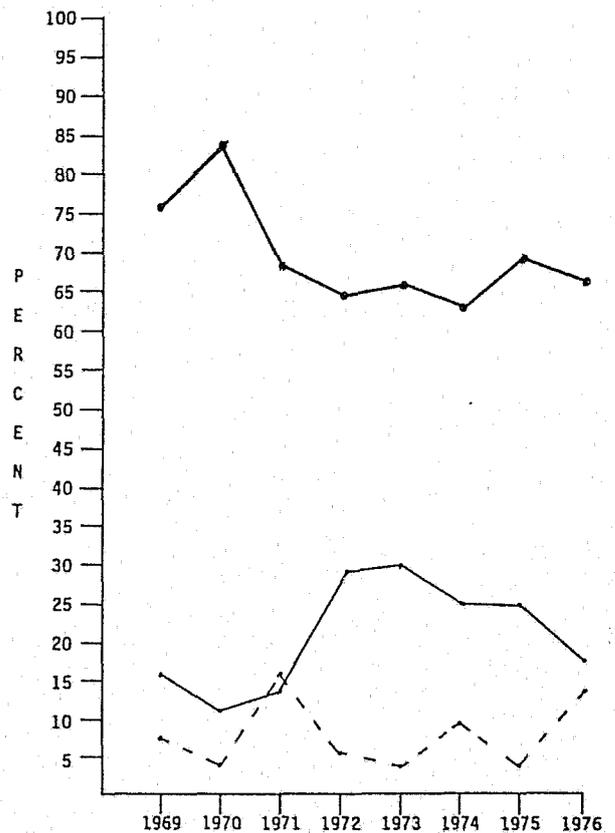
THE TRENDS FOR THE PROPORTION OF SAMPLE CASES IN THE EFFECTIVENESS CATEGORIES FOR ALL CIRCUITS STUDIED

— Effective      — Other  
 - - - Non-effective      [shaded] Treatment Period

TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES, 1969-1976



TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, 1969-1976



not meant to be generalizations about the circuit's total criminal caseload. (See Appendix E, page 107, for the effectiveness contingency tables and the chi-square results.)

Also, the limitations of comparing individual data points deserves reiteration. Four circuits are used so that the evaluator can control for various validity threats; control for threats is gained by establishing trends within each circuit. The trends therefore provide the most valid basis for treatment group - control group comparisons. Any comparisons of individual data points must be made in full recognition of the overall trends. This principle is a central limitation and assumption of this evaluation. (See page 39.)

No apparent trends in effective prosecutions emerged in the Twenty-sixth Judicial Circuit of Russell County (Figure 7, page 66). Among sample cases, however, the data do permit some observations about the types of dispositions within this circuit. The proportion of cases in the category other--cases pending, not processed, or pled guilty to a lesser offense--decreased over the observation period. A high proportion of sample dispositions for the pre-treatment period--a range of 31% to 37%--were classified as "other" (Table 21, page 68). This category decreased to a range of 14% to 28% after a post-treatment high of 33% in the first year of treatment.

No apparent trends indicating improvement in effective prosecutions emerged in the Thirty-fourth Judicial Circuit, Franklin County, either. Among the sample cases for this circuit, however, only a small proportion of cases were classified as "other" throughout the observation period with the high being 15% in 1975 (Table 22, page 69).

TABLE 21									
NUMBER AND PERCENTAGE OF SAMPLE CASES IN EACH EFFECTIVENESS CATEGORY									
FOR THE TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY, 1969-1976									
P e r i o d	Year	Effective Prosecutions*		Non-effective Prosecutions**		Other***		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
P R E T R E A T M E N T	1969	21	44%	12	25%	15	31%	48	100%
	1970	18	36%	16	32%	16	32%	50	100%
	1971	28	57%	3	6%	18	37%	49	100%
P O S T T R E A T M E N T	1972****	26	58%	4	9%	15	33%	45	100%
	1973	23	46%	13	26%	14	28%	50	100%
	1974	15	34%	23	52%	6	14%	44	100%
	1975	21	44%	16	33%	11	23%	48	100%
	1976	23	47%	18	37%	8	16%	49	100%
<p>*Jury Trial/Guilty; Judge Trial/Guilty; Guilty Plea to Original Charge.</p> <p>**Jury Trial/Innocent; Judge Trial/Innocent; Demurrer; Dismissal.</p> <p>***Pending; Not Prossed; Guilty Plea to Lesser Offense.</p> <p>****Year of program implementation.</p>									

While the proportion of cases in the category "other" remained relatively stable during the observation period, there was an inverse relationship between effective dispositions and non-effective dispositions. During

TABLE 22									
NUMBER AND PERCENTAGE OF SAMPLE CASES IN EACH EFFECTIVENESS CATEGORY									
FOR THE THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY, 1969-1976									
P e r i o d	Year	Effective Prosecutions*		Non-effective Prosecutions**		Other***		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
P R E T R E A T M E N T	1969	30	61%	14	29%	5	10%	49	100%
	1970	31	62%	14	28%	5	10%	50	100%
	1971	13	26%	37	74%	0	0%	50	100%
	1972	30	59%	17	33%	4	8%	51	100%
P O S T T R E A T M E N T	1973****	23	47%	24	49%	2	4%	49	100%
	1974	16	34%	24	51%	7	15%	47	100%
	1975	24	56%	16	37%	3	7%	43	100%
	1976	20	41%	24	49%	5	10%	49	100%
<p>*Jury Trial/Guilty; Judge Trial/Guilty; Guilty Plea to Original Charge.</p> <p>**Jury Trial/Innocent; Judge Trial/Innocent; Demurrer; Dismissal.</p> <p>***Pending; Nol Prossed; Guilty Plea to Lesser Offense.</p> <p>****Year of program implementation.</p>									

1970 62% of the cases were effective prosecutions while only 28% were classified as non-effective. The following year, 1972, only 26% of the sample cases were effective prosecutions as compared with 74% non-effective prosecutions.

In terms of the sample data, the Twentieth Judicial Circuit of Henry and Houston counties had an increase in the proportion of effective dispositions following the E-4 program implementation. The highest proportion of effective dispositions in the pre-treatment period was 59% in 1971, whereas the highest proportion in a post-treatment year was 64% in 1975 (Table 23). The lowest proportion in a pre-treatment year was 39% (1972) as compared with the low of 57% in a post-treatment year. Also, the proportion of sample cases in the non-effective category was very low for the Twentieth Judicial Circuit, exceeding 8 percent only once over the entire observation period.

P e r i o d	Year	Effective Prosecutions*		Non-effective Prosecutions**		Other***		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
P R E T R E A T M E N T	1969	33	50%	11	17%	22	33%	66	100%
	1970	28	42%	5	8%	34	50%	67	100%
	1971	41	59%	4	6%	24	35%	69	100%
	1972	26	39%	5	8%	36	53%	67	100%
	1973	31	44%	2	3%	37	53%	70	100%

TABLE 23 CONTINUED

P e r i o d	Year	Effective Prosecution*		Non-effective Prosecutions**		Other***		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
P O S T  T R E A T M E N T	1974*	39	57%	1	2%	28	41%	68	100%
	1975	41	64%	4	6%	19	30%	64	100%
	1976	32	50%	2	3%	30	47%	64	100%

\*Jury Trial/Guilty; Judge Trial/Guilty; Guilty Plea to Original Charge.  
 \*\*Jury Trial/Innocent; Judge Trial/Innocent; Demurrer; Dismissal.  
 \*\*\*Pending; Not Prossed; Guilty Plea to Lesser Offense.  
 \*\*\*\*Year of program implementation.

The control group maintained a high degree of effectiveness throughout the observation period with the proportion of sample cases in the effectiveness category ranging from 64% to 84% (Table 24).

P e r i o d	Year	Effective Prosecutions*		Non-effective Prosecutions**		Other***		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
N O  T R E A T M E N T	1969	37	76%	4	8%	8	16%	49	100%
	1970	42	84%	2	4%	6	12%	50	100%
	1971	34	70%	8	16%	7	14%	49	100%

TABLE 24 CONTINUED

P e r i o d	Year	Effective Prosecution*		Non-effective Prosecutions**		Other***		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
N O T R E A T M E N T	1972	32	65%	3	6%	14	29%	49	100%
	1973	33	66%	2	4%	15	30%	50	100%
	1974	32	64%	5	10%	13	26%	50	100%
	1975	35	70%	2	4%	13	26%	50	100%
	1976	34	68%	7	14%	9	18%	50	100%

\*Jury Trial/Guilty; Judge Trial/Guilty; Guilty Plea to Original Charge.  
 \*\*Jury Trial/Innocent; Judge Trial/Innocent; Demurrer; Dismissal.  
 \*\*\*Pending; Not Prossed; Guilty Plea to Lesser Offense.

In acknowledgment of the ambiguous character of cases decided with a guilty plea to a lesser offense, the evaluator analyzed a second set of data with plea-negotiated cases in the effective prosecution category. This reclassification of plea-negotiated cases resulted in no appreciable difference in the trends demonstrated by the original set of data. (The second set of data with the reclassification of plea-negotiated cases is included in Appendix F, page 110.)

While the failure to obtain significant chi-square values with regard to effectiveness argues against the impact of ALEPA funding on improving prosecutorial effectiveness, this same lack of chi-square significance supports the conclusion that no significant decreases in effectiveness occurred in the treatment circuits. The evaluator

therefore concludes that each of the circuits at least maintained its pre-treatment level of effective prosecutions. This conclusion is substantiated further by the fact that there is no noted increase in the proportion of cases classified as "other"--which includes nol prosses and plea negotiations--in any treatment circuit. The evaluator therefore concludes that the prosecution staffs achieved the significant increases in expeditious dispositions revealed by the expeditious prosecution variable while maintaining levels of effectiveness equal to those in their pre-treatment years.

#### D. PROSECUTORIAL EFFICIENCY

The goal for Project 1 of the E-4 Program is to maintain high prosecutorial efficiency in a time of increasing workloads by providing supportive personnel to the prosecution. The results from the prosecutorial efficiency variable indicate that the funded circuits achieved this goal.

The prosecutorial efficiency index devised for this evaluation reflects the proportion of cases that were either expeditiously prosecuted, effectively prosecuted, or expeditiously and effectively prosecuted.\* The index was computed for each observation year in each circuit studied using the sample data collected for the expeditiousness and effectiveness variables. In two of the treatment circuits the efficiency index rose after program implementation, and in the third treatment group it stabilized (Figure 8, page 74). In contrast,

---

\*The potential range of the index is from 0.000 to 1.000 with a rating of 0.000 indicating that no cases were either expeditiously or effectively prosecuted and a rating of 1.000 indicating that all cases were both expeditiously and effectively prosecuted.

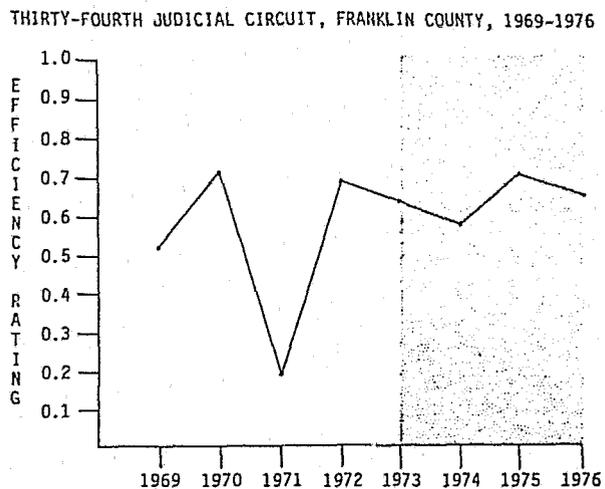
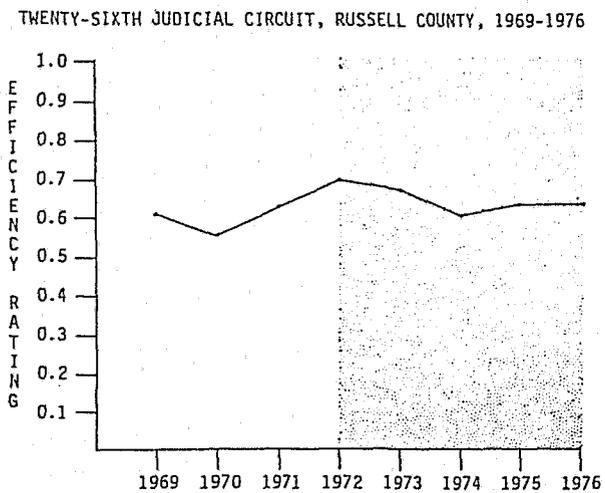
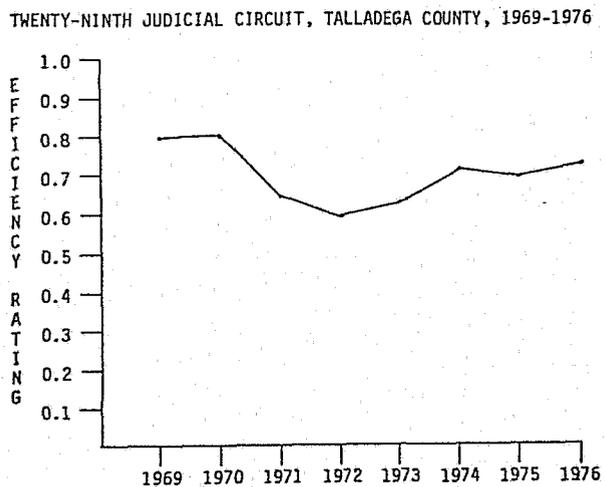
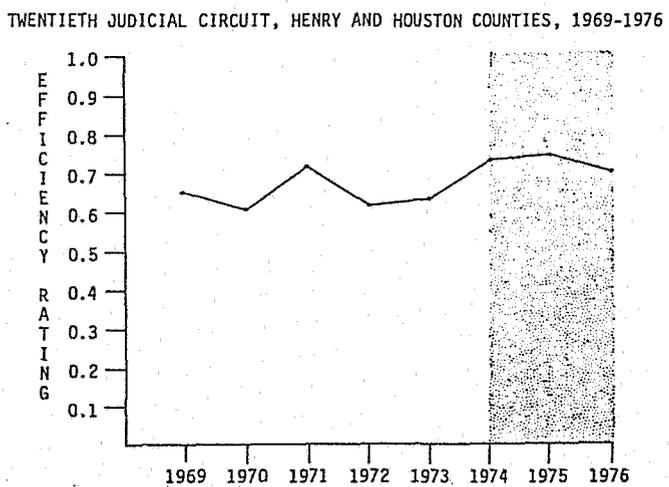


FIGURE 8

THE TRENDS FOR THE PROSECUTORIAL  
EFFICIENCY INDEX FOR ALL CIRCUITS STUDIED

Treatment Period



the prosecutorial efficiency index for the control group was high during the first two years of the observation period, but decreased slightly over the remainder.

In the Twenty-sixth Judicial Circuit of Russell County the highest efficiency rating 0.711 came in 1972, the year of program implementation. This figure is notably higher than any of the indexes in the pre-treatment year (Table 25). Although the efficiency rating dropped to 0.625 in 1974, a rating lower than the best pre-treatment rating of 0.632 in 1971, during all of the other post-treatment years the efficiency ratings were higher than those for the pre-treatment years.

Year	Judicial Circuit			
	Twenty-sixth Russell County	Thirty-fourth Franklin County	Twentieth Henry and Houston Counties	Twenty-ninth Talladega County
1969	0.604	0.520	0.676	0.800
1970	0.570	0.720	0.610	0.802
1971	0.632	0.200	0.728	0.660
1972	0.711*	0.706	0.627	0.600
1973	0.670	0.653*	0.643	0.630
1974	0.625	0.595	0.742*	0.720
1975	0.646	0.721	0.757	0.700
1976	0.640	0.663	0.711	0.730

\*Year of program implementation.

The highest efficiency index for the Thirty-fourth Judicial Circuit in Franklin County was 0.721 in post-treatment 1975 (Table 25, page 75). Although two pre-treatment years had efficiency ratings over 0.700 (1970 and 1972), the pre-treatment low was 0.200. The lowest rating for a post-treatment year was 0.595. The treatment appears, then, to have helped stabilize the level of efficiency in this circuit.

In the Twentieth Judicial Circuit, Henry and Houston counties, the prosecutorial efficiency index rose from 0.643 in 1973 to 0.742 in 1974, the year of program implementation (Table 25). The highest efficiency rating in this circuit came in post-treatment 1975 at 0.757. After program implementation, the efficiency index in the Twentieth Judicial Circuit never fell below 0.700.

The highest prosecutorial efficiency indexes for the Thirty-fourth Judicial Circuit of Talladega were 0.800 in 1969 and 0.802 in 1970, the first two years of the observation period (Table 25). Although the indexes for all four of the circuits observed fluctuated, the control circuit was the only one that showed a higher index in the first year of observation than it did in the last. It should be emphasized, however, that regardless of fluctuations the index maintained by the control group was relatively high throughout the observation period.

The prosecutorial efficiency measures show an increase in efficiency in each treatment circuit during the post-treatment years. Since the efficiency index indicates the proportion of cases that are either expeditiously disposed, effectively disposed, or both expeditiously and effectively disposed, the increases in the index demonstrated by the treatment circuits reflect that the treatment circuits

achieved the overall E-4 Program goal. With the efficiency index for all treatment circuits falling in a range of 0.595 to 0.757 during their respective post-treatment periods, the evaluator concludes that following ALEPA funding an increasing proportion of criminal cases in the treatment circuits underwent an expeditious prosecution and/or an effective prosecution.

#### IV. FINDINGS AND RECOMMENDATIONS

Using measurement criteria, data collection procedures, analytical techniques, and a research design, the evaluator has investigated the impact of ALEPA's Project 1 of the E-4 Program on attaining its three objectives and program goal. In this section are the findings and recommendations for the evaluation effort.

##### A. FINDINGS

1. Program objective: to reduce case backlog.

Evaluation measure: adjusted annual backlog.

The adjusted annual backlog trends do not reveal that the treatment circuits attained their stated objective of reducing case backlog. The information gathered on backlog does indicate, however, that the E-4 Program helped prevent accelerated increases in backlog. The substantial increases in indictments in the various circuits observed might easily have resulted in such backlog increases had there been no funding support.

2. Program objective: to reduce delays in prosecution.

Evaluation measure: expeditious prosecution.

On the basis of the expeditious prosecution trends observed in the treatment circuits, the evaluator concludes that the E-4 Program has increased the proportion of cases that move from arrest to disposition within the recommended standard of 210 days.

3. Program objective: to increase the successful prosecution rate.

Evaluation measure: effective prosecution.

The trend analysis of effective prosecutions does not establish that the E-4 Program increased the proportion of cases receiving a conviction. It should be noted, however, that even with caseloads increasing substantially and a higher proportion of dispositions coming within the 210-day standard than before program implementation, the treatment circuits maintained their previous levels of effectiveness.

4. Program goal: to maintain high prosecutorial efficiency.

Evaluation measure: prosecutorial efficiency index.

Trends in the prosecutorial efficiency index reveal that for the circuits being studied the E-4 Program increased the proportion of dispositions that were expeditious and/or effective.

#### B. RECOMMENDATIONS

In terms of the measurement criteria of this study, Project 1 of ALEPA's E-4 Program did not demonstrate achievement of its objective to increase the successful prosecution rate. It also did not demonstrate achievement of its objective to reduce case backlog, although it did prevent backlog from increasing as high as it probably would have otherwise. The E-4 Program, however, did demonstrate achievement of its objective to reduce delays in prosecution and achievement of its goal to maintain prosecutorial efficiency in a time of rising indictments. The results of the study indicate, then, that because of the E-4 Program a higher proportion of cases are moving through to disposition within 210 days and a higher proportion of cases are meeting either both or one of the criteria for expeditiousness and

effectiveness than was true prior to program implementation. The achievement of the reduction in case delay objective and the overall program goal indicate distinct progress on the part of the prosecution through ALEPA E-4 funding.

The progress in terms of expeditiousness gives reason to look carefully at the program's inability to demonstrate a reduction in backlog. The objectives to reduce prosecutorial delays and to reduce backlog are closely related, and in some instances the achievement of one would ensure the achievement of the other. However, the evaluator concludes that even though the proportion of cases moving from arrest to disposition within 210 days increased in the circuits observed, it did not increase enough to offset the rising number of indictments to the extent of reducing backlog. Or put another way, indictments rose so quickly that the proportional increase in cases prosecuted expeditiously nevertheless resulted in an absolute increase in backlog. So long as indictments continue to rise, then, prosecution staffs must increase the proportion of cases prosecuted by considerable margins if they are to realize net reductions in backlog.

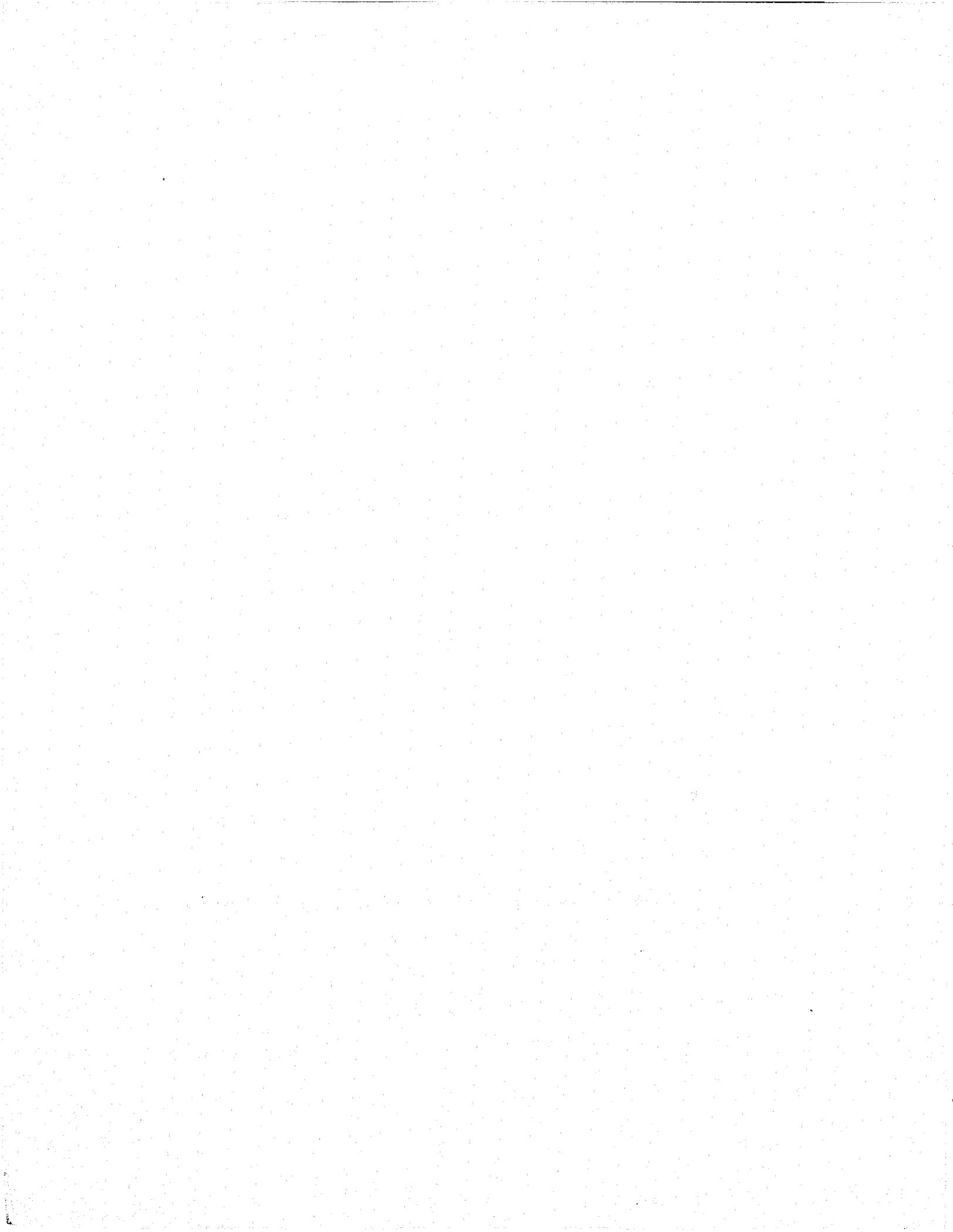
One final comment is in order. Generally speaking, the prosecution has more control over court delays than it does over the final outcome of a case; the former is primarily a matter of administration whereas more factors than administration determine the latter. This observation leads the evaluator to believe that the fact expeditiousness improved should carry more weight than the fact no notable increase in effectiveness occurred. Most importantly, as emphasized in the findings, it is significant that the improvements in

expeditiousness were accomplished without any loss in effectiveness. This factor, improved expeditiousness with stable effectiveness, accounts for the achievement of the overall program goal.

Considering the E-4 Program's impact on the general sluggishness of the judicial system as determined in this study and in view of the possibility of Alabama's adopting the recommended standards for speedy trial, the evaluator submits the following recommendations:

1. ALEPA should continue to fund Project 1 of the E-4 Program within the limits allowed by the current assumption of cost policy.
2. The state of Alabama should assume the cost of personnel hired under the E-4 Program in accordance with the assumption of cost schedule governing ALEPA's support of the program.

APPENDIX A  
E-4 BUDGETS FOR THE TREATMENT GROUPS



**CONTINUED**

**1 OF 2**

RUSSELL COUNTY  
71-A5-30 and 71-A5-11

## PERSONNEL

District Attorney (5%)	\$ 970.00	
Chief Investigator	9,240.00	
Investigator	7,920.00	
Fiscal Officer	1,620.00	
Fringe Benefits	<u>1,222.91</u>	
TOTAL PERSONNEL		<u>\$20,972.91</u>
TOTAL PROJECT COST		\$20,972.91

RUSSELL COUNTY  
72-A5-35 and 72-A5-39

PERSONNEL

Investigator	\$7,500.00
Assistant District Attorney	7,200.00
Secretary (part time)	2,080.00
Fringe Benefits	<u>1,049.44</u>

TOTAL PERSONNEL

\$17,829.44

EQUIPMENT

1 Automobile	\$3,400.00
1 Electric Typewriter	<u>500.00</u>

TOTAL EQUIPMENT

\$3,900.00

TRAVEL

\$309.25

TOTAL TRAVEL

\$309.25

OPERATING EXPENSES

Maintenance and Insurance Auto	\$1,800.00
Supplies	250.00
Indirect Cost	<u>1,242.94</u>

TOTAL OPERATING EXPENSES

\$3,292.94

TOTAL PROJECT COST

\$25,331.63

RUSSELL COUNTY  
73-A5-41 and 73-A5-2 (12 months)

## PERSONNEL

Administrative Assistant	\$11,180.40
Secretary	4,194.00
Fringe Benefits	<u>2,000.47</u>

TOTAL PERSONNEL	\$17,374.87
-----------------	-------------

OPERATING EXPENSES	\$290.00
--------------------	----------

TOTAL OPERATING EXPENSES	\$290.00
--------------------------	----------

## EQUIPMENT

Office Radio	300.00
Mobile Units	2,850.00
Photocopy Machine	<u>936.00</u>

TOTAL EQUIPMENT	\$4,086.00
-----------------	------------

## TRAVEL EXPENSES

1 Trip to Snowmass, Col.	472.26
--------------------------	--------

TOTAL TRAVEL	<u>\$472.26</u>
--------------	-----------------

TOTAL PROJECT COST	\$22,223.13
--------------------	-------------

RUSSELL COUNTY  
76-A5-23 (9 months)

## PERSONNEL

Assistant District Attorney	\$9,000.00	
Fringe Benefits	<u>1,315.00</u>	
TOTAL PERSONNEL		\$10,315.00

## EQUIPMENT

Dictation Equipment	985.00	
Car	<u>4,920.00</u>	
TOTAL EQUIPMENT		<u>\$5,905.00</u>
TOTAL PROJECT COST		\$16,220.00

RUSSELL COUNTY  
75-A5-12 (12 months)

## PERSONNEL

Secretary	\$4,194.00	
Fringe Benefits	<u>246.00</u>	
TOTAL PERSONNEL		<u>\$4,440.00</u>
TOTAL PROJECT COST		\$4,440.00

RUSSELL COUNTY  
74-A5-50 (12 months)

## PERSONNEL

Administrative Assistant	\$11,180.04	
Fringe Benefits	<u>1,684.00</u>	
TOTAL PERSONNEL		<u>\$12,864.00</u>
TOTAL PROJECT COST		\$12,864.00

FRANKLIN COUNTY  
72-A1-1 and 72-A1-78 (12 months)

## PERSONNEL

Secretary	\$4,924.44
Trial Coordinator/Investigator	8,400.00
Fringe Benefits	<u>1,823.17</u>

TOTAL PERSONNEL		\$15,147.61
-----------------	--	-------------

## OPERATING EXPENSES

Auto Operation and Maintenance	1,800.00
Insurance	<u>270.00</u>

TOTAL OPERATING EXPENSES		\$2,070.00
--------------------------	--	------------

## EQUIPMENT

1 Automobile	3,400.00
1 Dual Frequency Radio	1,250.00
1 Portable Tape Recorder	300.00
1 Crime Investigation Kit	300.00
1 Electric Typewriter	418.15
1 Latent Fingerprint Kit	75.00
1 Narcotics Analysis Kit	70.00
1 Evidence Sealing and Identification Kit	50.00
300 Evidence Bags	20.00
1 Thief Detection Kit	<u>17.00</u>

TOTAL EQUIPMENT		<u>5,900.15</u>
-----------------	--	-----------------

TOTAL PROJECT COST		\$23,117.76
--------------------	--	-------------

FRANKLIN COUNTY  
74-A1-5 (12 months)

PERSONNEL

Secretary	\$5,148.00	
Trial Coordinator/Investigator	9,000.00	
Fringe Benefits	<u>828.00</u>	
TOTAL PERSONNEL		\$14,976.00

OPERATING EXPENSES

Auto Operating and Maintenance	1,500.00	
TOTAL OPERATING EXPENSES		<u>1,500.00</u>
TOTAL PROJECT COST		\$16,476.00

FRANKLIN COUNTY  
(73-A1-22)

Equipment	\$3,279.00	
TOTAL PROJECT COST		\$3,279.00

FRANKLIN COUNTY  
76-A5-5 (9 months)

PERSONNEL

Secretary (100%)	\$4,248.00	
Trial-Cordinator/Investigator (100%)	6,660.00	
Fringe Benefits	<u>639.00</u>	
TOTAL PERSONNEL		\$11,547.00

OPERATING EXPENSES

Auto Operation and Maintenance	1,350.00	
TOTAL OPERATING EXPENSES		<u>1,350.00</u>
TOTAL PROJECT COST		\$12,897.00

FRANKLIN COUNTY  
75-A1-29 (6 months)

PERSONNEL

Secretary	\$2,832.00	
Trial-Cordinator/Investigator	4,050.00	
Fringe Benefits	<u>403.00</u>	
TOTAL PERSONNEL		\$7,285.00

OPERATING EXPENSES

Auto Operating and Maintenance	750.00	
TOTAL OPERATING EXPENSES		<u>750.00</u>
TOTAL PROJECT COST		\$8,035.00

HOUSTON COUNTY  
73-A7-6 and 73-A7-32

## PERSONNEL

Investigator (12 months)	\$10,000.00
Assistant District Attorney (9 months)	10,874.00
Secretary (9 months)	4,016.25
Fringe Benefits	<u>2,370.87</u>

## TOTAL PERSONNEL

\$27,261.12

## TRAVEL

\$2,000.00

## OPERATING EXPENSES

Vehicle Operation and Maintenance (12 months)	\$1,800.00
Telephone (9 months)	1,450.00
Office Supplies (9 months)	<u>900.00</u>

## TOTAL OPERATING EXPENSES

\$4,150.00

## EQUIPMENT

Typewriter	\$ 495.00
Executive Desk	175.00
Secretarial Desk	200.00
Executive Chair	90.00
Secretarial Chair	45.00
Guest Arm Chairs	150.00
File Cabinet	144.00
Dictating Equipment	600.00
Transcribing Equipment	600.00
Book Case	75.00
Vehicle	3,282.21
Mobile Radio	2,153.25
Camera	347.97
Investigator Kit	375.00
Video Tape Recorder	2,400.00
Blue Light	44.92
Tape Recorder	149.00
Dictating Equipment	<u>604.00</u>

## TOTAL EQUIPMENT

\$11,930.35

## TOTAL PROJECT COST

\$45,341.47

HOUSTON COUNTY  
75-A7-13 and 75-A7-32

## PERSONNEL

Assistant District Attorney (6 months)	\$7,975.00
Secretary (6 months)	2,945.00
Investigator (12 months)	11,000.00
Fringe Benefits	<u>3,299.00</u>

TOTAL PERSONNEL	\$25,219.00
-----------------	-------------

## OPERATING EXPENSES

Telephone (6 months)	\$ 900.00
Vehicle maintenance and operation (6 months)	<u>1,200.00</u>

TOTAL OPERATING EXPENSES	\$2,100.00
--------------------------	------------

## TRAVEL

<u>\$789.00</u>
-----------------

TOTAL PROJECT COST	\$28,108.00
--------------------	-------------

HOUSTON COUNTY  
74-A7-20 (2 months)

## PERSONNEL

Investigator (2 months)	\$1,750.00
Fringe Benefits	<u>263.00</u>

TOTAL PERSONNEL	\$2,013.00
-----------------	------------

## OPERATING EXPENSES

Vehicle Operation and Maintenance (2 months)	<u>\$200.00</u>
---	-----------------

TOTAL OPERATING EXPENSES	<u>\$200.00</u>
	<u>\$2,213.00</u>

HOUSTON COUNTY  
76-A7-23 (9 months)

## PERSONNEL

Assistant District Attorney	\$12,561.00
Investigator	8,663.00
Secretary	4,638.00
Fringe Benefits	<u>4,822.00</u>

TOTAL PERSONNEL	\$30,684.00
-----------------	-------------

## OPERATING EXPENSES

Telephone	\$ 900.00
Supplies	450.00
Vehicle Operation and Maintenance	<u>1,282.00</u>

TOTAL OPERATING EXPENSES	\$2,632.00
--------------------------	------------

## EQUIPMENT

Copier	<u>\$3,500.00</u>
--------	-------------------

TOTAL EQUIPMENT	<u>\$3,500.00</u>
-----------------	-------------------

TOTAL PROJECT COST	\$36,816.00
--------------------	-------------

APPENDIX B

CODING SCHEME FOR COMPUTER PROCESSING OF SAMPLE DATA

## CODING SCHEME FOR DATA COLLECTION

1-2 Circuit  
 3-4 Year  
 5-8 Docket number  
 9-14 Date confined to jail to await trial or date bond was posted if not a jail date  
 15-20 Date of appeal if filed on appeal  
 21-26 Date of disposition  
 27 Disposition  
     1 = Jury trial, guilty  
     2 = Jury trial, innocent  
     3 = Trial by judge, guilty  
     4 = Trial by judge, innocent  
     5 = Guilty plea  
     6 = Not proessed  
     7 = Still pending at end of year  
     8 = Demurrer  
     9 = Dismissed  
 28-29 Original charge  
     00 = Writ of Error Coram Nobis  
     1 = Murder 1st  
     2 = Murder 2nd  
     3 = Manslaughter 1st  
     4 = Manslaughter 2nd  
     5 = Robbery 1st  
     6 = Robbery 2nd  
     7 = Assault 1st  
     8 = Assault 2nd  
     9 = Burglary 1st  
    10 = Burglary 2nd  
    11 = Grand larceny  
    12 = Petty larceny  
    13 = Rape  
    14 = Arson  
    15 = Perjury  
    16 = Embezzlement  
    17 = Forgery  
    18 = Sodomy  
    19 = Bigamy  
    20 = Using motor vehicle without owner's consent  
    21 = Distilling and possession of a still  
    22 = Vagrancy  
    23 = Obtaining money by false pretense  
    24 = Hunting at night  
    25 = Escape  
    26 = No driver's license  
    27 = Disturbing the peace  
    28 = Receiving or concealing stolen property

- 29 = Possession of narcotics
- 30 = Carrying gun without license
- 31 = Trespassing
- 32 = Violation of Alabama Drug Abuse Act (Possession of drugs)
- 33 = Marijuana Law
- 34 = Preventing persons from engaging in peace
- 35 = Violation of Title 14, Section 428
- 36 = Violation of Title 26, Section 336
- 37 = Defamation
- 38 = Bad check
- 39 = Bringing stolen property into the state
- 40 = Leaving scene of accident
- 41 = Violation prohibition law
- 42 = Unlawful use of credit card
- 43 = Driving while intoxicated
- 44 = Highway intoxication
- 45 = Disorderly conduct
- 46 = Carnal knowledge
- 47 = Failure to dim lights
- 48 = Driver's license revoked
- 49 = Violation of Title 14, Section 40
- 50 = Improper tag
- 51 = Reckless driving
- 52 = Abandonment
- 53 = Violation of AUCS Act
- 54 = Indecent molestation of a child
- 55 = Insulting a police officer
- 56 = Selling, removing, or concealing mortgaged property
- 57 = Presenting firearms at another
- 58 = Concealed weapon
- 59 = Indecent exposure
- 60 = Giving false oath
- 61 = Threatening a witness
- 62 = Bribery of a voter
- 30-31 Final charge
- 32 Type of attorney
  - 1 = Appointed
  - 2 = Private
- 33 Judge
  - 1 = Name of judge
  - 2 = Name of judge
  - 3 = Name of judge
  - 4 = Name of judge
- 34-37 Length of Sentence (YYMM)
  - 0000 - Fine only
  - 9999 - Life imprisonment

APPENDIX C

CONTROL CONTINGENCY TABLES FOR THE EXPEDITIOUS PROSECUTION VARIABLE

The tables in Appendix C are control contingency tables for expeditious prosecutions in the three treatment circuits. There are two tables for each treatment circuit, Table 1 and Table 2. For each circuit, Table 1 is created by dividing the observation years into two categories using the year before treatment as the dividing point. In Table 2, the observation years are divided with the year after treatment used as the dividing point. A chi-square value has been computed for each table.

A 3 x 2 cross-classification of Table 2 for the Twentieth Judicial Circuit resulted in only one sample case in the lower right cell. A minimum cell size of five is recommended for computing chi-square values. The sample data in Table 2 for this circuit, then, are grouped 2 x 2 to meet this recommendation.

CONTROL CONTINGENCY TABLE 1 FOR EXPEDITIOUS PROSECUTION IN THE TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY				
Expeditiousness Category	1969-1970		1971-1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Category I Within 210 days	76	78%	238	83%
Category II 211-365 days	12	12%	23	8%
Category III More than 365 days	10	10%	25	9%
Raw chi-square is 1.87; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

CONTROL CONTINGENCY TABLE 2 FOR EXPEDITIOUS PROSECUTION IN THE TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY				
Expeditiousness Category	1969-1972		1973-1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Category I Within 210 days	148	77%	166	87%
Category II 211-365 days	19	10%	16	8%
Category III More than 365 days	25	13%	10	5%
Raw chi-square is 8.22; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

CONTROL CONTINGENCY TABLE 1 FOR EXPEDITIOUS PROSECUTION IN THE THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY				
Expeditiousness Category	1969-1971		1972-1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Category I Within 210 days	70	47%	206	86%
Category II 211-365 days	10	6%	16	7%
Category III More than 365 days	70	47%	17	7%
Raw chi-square is 84.76; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

CONTROL CONTINGENCY TABLE 2 FOR EXPEDITIOUS PROSECUTION IN THE THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY				
Expeditiousness Category	1969-1973		1974-1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Category I Within 210 days	153	58%	123	88%
Category II 211-365 days	19	8%	7	5%
Category III More than 365 days	78	34%	9	7%
Raw chi-square is 33.98; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

CONTROL CONTINGENCY TABLE 1 FOR EXPEDITIOUS PROSECUTION IN THE TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES				
Expeditiousness Category	1969-1972		1973-1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Category I Within 210 days	235	86%	239	90%
Category II 211-365 days	20	7%	20	7%
Category III More than 365 days	18	7%	7	3%
Raw chi-square is 4.78; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

CONTROL CONTINGENCY TABLE 2 FOR EXPEDITIOUS PROSECUTION IN THE TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES				
Expeditiousness Category	1969-1974		1975-1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Category I Within 210 days	356	87%	118	92%
Categories II and III 211-365 days More than 365 days	55	13%	10	8%
Raw chi-square is 2.46; required chi-square with two degrees of freedom is 3.84 at 0.05 level of significance.				

APPENDIX D  
STANDARD ERROR OF THE ESTIMATE CALCULATED FOR  
CATEGORY I OF THE EXPEDITIOUSNESS VARIABLE

Appendix D presents the standard error of the estimate for the expeditious prosecution measure. For each circuit and each observation year, a standard error of estimate is computed for the proportion of sample cases in the expeditiousness Category I. The formula used to calculate the standard error of estimate for a single observation year in any circuit is:

$$\text{One Standard Error} = \sqrt{\frac{P \times Q}{N}} \times \sqrt{\frac{T - N}{T}}$$

- P = Proportion of sample cases in Category I
- Q = Proportion of sample cases in Categories II and III
- N = Sample size
- T = Total number of dispositions

STANDARD ERROR OF ESTIMATES FOR PROPORTIONS OF SAMPLE CASES IN  
EXPEDITIOUSNESS CATEGORY I FOR THE TWENTY-SIXTH JUDICIAL CIRCUIT,  
RUSSELL COUNTY

Year	Sample Size	Total Dispositions	Proportion Category I	One Standard Error of Estimate
1969	48	184	77%	0.05
1970	50	177	78%	0.05
1971	49	162	69%	0.06
1972	45	146	84%	0.04
1973	50	129	88%	0.03
1974	44	215	90%	0.04
1975	48	271	85%	0.05
1976	50	330	82%	0.04

STANDARD ERROR OF ESTIMATES FOR PROPORTIONS OF SAMPLE CASES IN  
EXPEDITIOUSNESS CATEGORY I FOR THE THIRTY-FOURTH JUDICIAL CIRCUIT,  
FRANKLIN COUNTY

Year	Sample Size	Total Dispositions	Proportion Category I	One Standard Error of Estimate
1969	50	118	44%	0.05
1970	50	100	82%	0.03
1971	50	145	14%	0.04
1972	51	212	82%	0.04
1973	49	256	84%	0.05
1974	47	208	85%	0.04
1975	43	187	88%	0.04
1976	49	121	92%	0.03

STANDARD ERROR OF ESTIMATES FOR PROPORTIONS OF SAMPLE CASES IN  
EXPEDITIOUSNESS CATEGORY I FOR THE TWENTIETH JUDICIAL CIRCUIT,  
HENRY AND HOUSTON COUNTIES

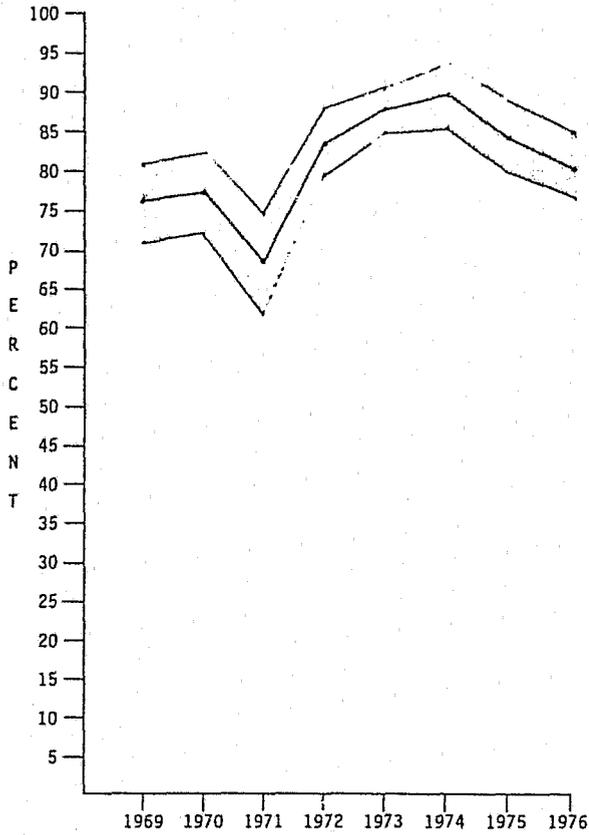
Year	Sample Size	Total Dispositions	Proportion Category I	One Standard Error of Estimate
1969	68	350	88%	0.04
1970	68	326	82%	0.04
1971	70	329	87%	0.04
1972	67	331	86%	0.04
1973	70	294	84%	0.04
1974	68	560	91%	0.03
1975	64	679	92%	0.03
1976	64	665	92%	0.03

STANDARD ERROR OF ESTIMATES FOR PROPORTIONS OF SAMPLE CASES IN  
EXPEDITIOUSNESS CATEGORY I FOR THE TWENTY-NINTH JUDICIAL CIRCUIT,  
TALLADEGA COUNTY

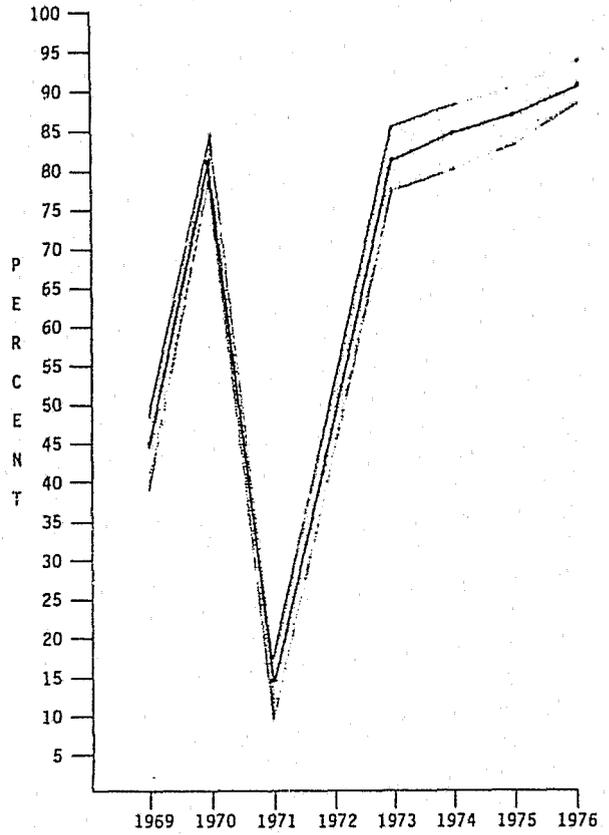
Year	Sample Size	Total Dispositions	Proportion Category I	One Standard Error of Estimate
1969	50	148	88%	0.04
1970	50	139	80%	0.05
1971	50	160	64%	0.06
1972	51	177	58%	0.06
1973	49	197	60%	0.06
1974	47	255	80%	0.05
1975	43	303	70%	0.05
1976	49	310	78%	0.05

To illustrate the information in the tables on pages 103 and 104, the proportions of Category I sample cases are depicted by trend lines in the figure on page 106. The shaded area about each trend line represents two standard errors for each estimate. With two standard errors, there is less than a 5% probability that the proportions of Category I cases of all case dispositions is not in the shaded area. Thus, in all likelihood, the proportions of Category I cases for the entire population of cases is in the shaded area.

TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY, 1969-1976

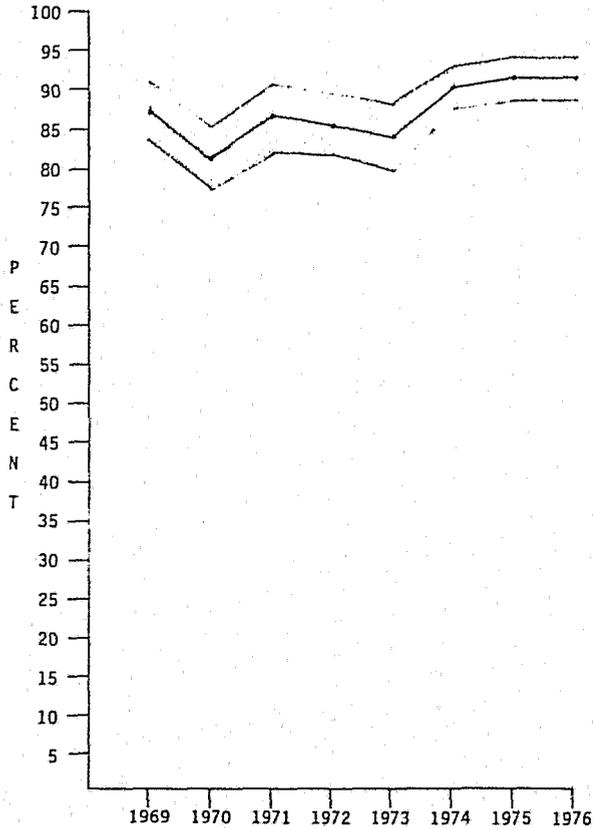


THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY, 1969-1976

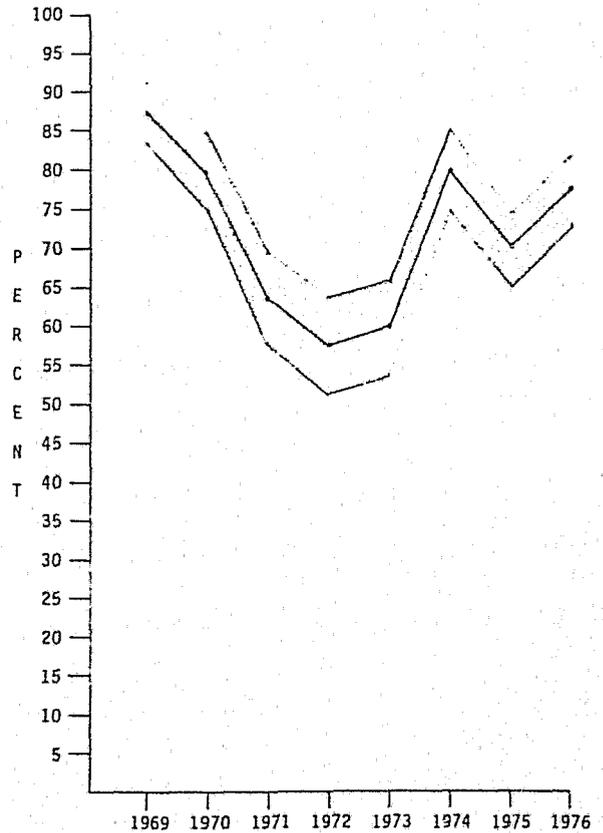


STANDARD ERROR OF THE ESTIMATE FOR EXPEDITIOUS PROSECUTIONS  
(CATEGORY I) IN ALL CIRCUITS UNDER OBSERVATION

TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES, 1969-1976



TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, 1969-1976



APPENDIX E  
CONTINGENCY TABLES FOR THE EFFECTIVE PROSECUTION VARIABLE

CONTINGENCY TABLE FOR EFFECTIVE PROSECUTIONS IN THE TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY				
Effectiveness Category	Pre-treatment 1969 - 1971		Post-treatment 1972 - 1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Effective	67	46%	108	46%
Non-effective	31	21%	74	31%
Other	49	33%	54	23%
Raw chi-square is 7.16; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

CONTINGENCY TABLE FOR EFFECTIVE PROSECUTIONS IN THE THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY				
Effectiveness Category	Pre-treatment 1969 - 1972		Post-treatment 1973 - 1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Effective	104	52%	83	44%
Non-effective	82	41%	88	47%
Other	14	7%	17	9%
Raw chi-square is 2.49; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

CONTINGENCY TABLE FOR EFFECTIVE PROSECUTIONS IN THE TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES				
Effectiveness Category	Pre-treatment 1969 - 1973		Post-treatment 1974 - 1976	
	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Effective	159	47%	112	57%
Non-effective	27	8%	7	4%
Other	153	45%	77	39%
Raw chi-square is 7.33; required chi-square with two degrees of freedom is 9.21 at 0.01 level of significance.				

APPENDIX F

CONTROL DATA FOR THE EFFECTIVENESS VARIABLE

CLASSIFYING PLEA-NEGOTIATED CASES AS EFFECTIVE DISPOSITIONS

NUMBER AND PERCENTAGE OF SAMPLE CASES IN EACH EFFECTIVENESS CATEGORY  
FOR THE TWENTY-SIXTH JUDICIAL CIRCUIT, RUSSELL COUNTY, 1969-1976

P e r i o d	Year	Effective Prosecutions*		Non-effective Prosecutions**		Other***		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
P R E T R E A T M E N T	1969	28	58%	12	25%	8	17%	48	100%
	1970	24	48%	16	32%	10	20%	50	100%
	1971	34	69%	3	6%	12	25%	49	100%
P O S T T R E A T M E N T	1972****	35	78%	4	9%	6	13%	45	100%
	1973	29	58%	13	26%	8	16%	50	100%
	1974	18	41%	23	52%	3	7%	44	100%
	1975	26	54%	16	33%	6	13%	48	100%
	1976	29	59%	18	37%	2	4%	49	100%

\*Jury Trial/Guilty; Judge Trial/Guilty; Guilty Plea to Original Charge; Guilty Plea to Lesser Offense.

\*\*Jury Trial/Innocent; Judge Trial/Innocent; Demurrer; Dismissal.

\*\*\*Pending; Not Pressed.

\*\*\*\*Year of program implementation.

NUMBER AND PERCENTAGE OF SAMPLE CASES IN EACH EFFECTIVENESS CATEGORY FOR THE THIRTY-FOURTH JUDICIAL CIRCUIT, FRANKLIN COUNTY, 1969-1976									
P e r i o d	Year	Effective Prosecutions*		Non-effective Prosecutions**		Other***		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
P R E T R E A T M E N T	1969	32	65%	14	29%	3	6%	49	100%
	1970	33	66%	14	28%	3	6%	50	100%
	1971	13	26%	37	74%	0	0%	50	100%
	1972	33	65%	17	33%	1	2%	51	100%
P O S T T R E A T M E N T	1973****	25	51%	24	49%	0	0%	49	100%
	1974	23	49%	24	51%	0	0%	47	100%
	1975	26	61%	16	37%	1	2%	43	100%
	1976	25	51%	24	49%	0	0%	49	100%
<p>*Jury Trial/Guilty; Judge Trial/Guilty; Guilty Plea to Original Charge; Guilty Plea to Lesser Offense.  **Jury Trial/Innocent; Judge Trial/Innocent; Demurrer; Dismissal.  ***Pending; Not Prossed.  ****Year of program implementation.</p>									

NUMBER AND PERCENTAGE OF SAMPLE CASES IN EACH EFFECTIVENESS CATEGORY  
FOR THE TWENTIETH JUDICIAL CIRCUIT, HENRY AND HOUSTON COUNTIES  
1969-1976

P e r i o d	Year	Effective Prosecutions*		Non-effective Prosecutions**		Other***		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
P R E T R E A T M E N T	1969	40	61%	11	17%	15	23%	66	100%
	1970	35	52%	5	8%	27	40%	67	100%
	1971	49	71%	4	6%	16	23%	69	100%
	1972	41	61%	5	8%	21	31%	67	100%
	1973	39	56%	2	3%	29	41%	70	100%
P O S T T R E A T M E N T	1974	47	69%	1	2%	20	29%	68	100%
	1975	45	70%	4	6%	15	23%	64	100%
	1976	37	58%	2	3%	25	39%	64	100%

\*Jury Trial/Guilty; Judge Trial/Guilty; Guilty Plea to Original Charge; Guilty Plea to Lesser Offense.

\*\*Jury Trial/Innocent; Judge Trial/Innocent; Demurrer; Dismissal.

\*\*\*Pending; Not Pressed.

\*\*\*\*Year of program implementation.

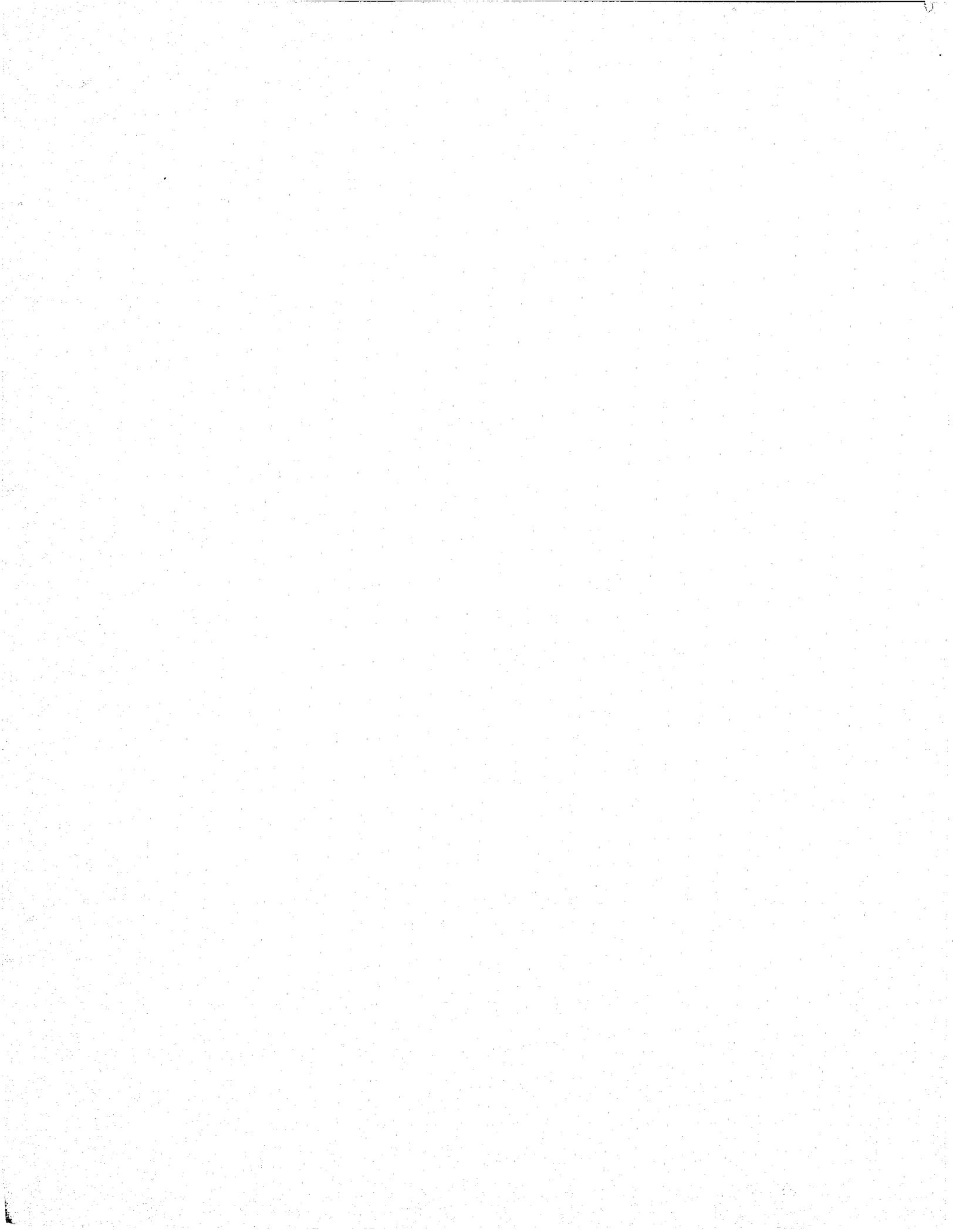
NUMBER AND PERCENTAGE OF SAMPLE CASES IN EACH EFFECTIVENESS CATEGORY  
FOR THE TWENTY-NINTH JUDICIAL CIRCUIT, TALLADEGA COUNTY, 1969-1976

P e r i o d	Year	Effective Prosecutions*		Non-effective Prosecutions**		Other***		TOTAL SAMPLE	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
N O T R E A T M E N T	1969	39	80%	4	8%	6	12%	49	100%
	1970	45	90%	2	4%	3	6%	50	100%
	1971	38	78%	8	16%	3	6%	49	100%
	1972	36	72%	3	6%	11	22%	50	100%
	1973	36	72%	2	4%	12	24%	50	100%
	1974	36	72%	5	10%	9	18%	50	100%
	1975	40	80%	2	4%	8	16%	50	100%
	1976	38	76%	7	14%	5	10%	50	100%

\*Jury Trial/Guilty; Judge Trial/Guilty; Guilty Plea to Original Charge; Guilty Plea to Lesser Offense.

\*\*Jury Trial/Innocent; Judge Trial/Innocent; Demurrer; Dismissal.

\*\*\*Pending; Nol Prossed.



**END**